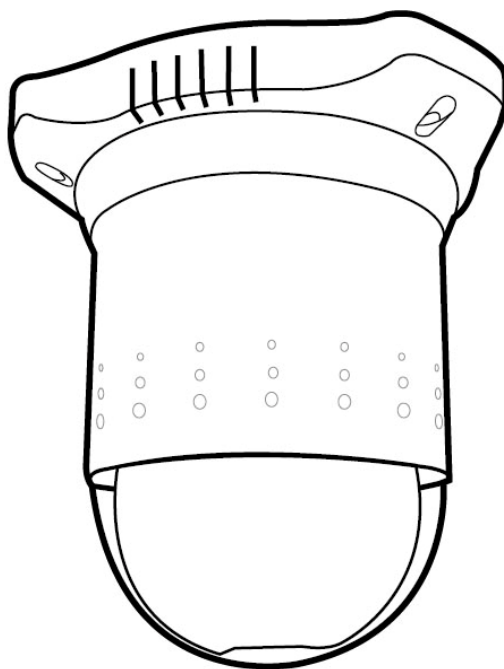


# **ALC-9451 High-Speed Dome Network Camera**



## **User Manual**

Software Version 1.14

# Contents

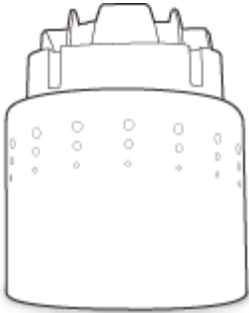
|                                           |           |
|-------------------------------------------|-----------|
| Contents .....                            | 2         |
| Package Contents .....                    | 4         |
| System Requirements.....                  | 6         |
| Introduction.....                         | 7         |
| Features and advantages .....             | 7         |
| System Introduction.....                  | 8         |
| System Introduction.....                  | 8         |
| Hardware Installation.....                | 10        |
| Camera Settings .....                     | 23        |
| Camera Setting from a Router .....        | 25        |
| Change the Internet Explorer Setting..... | 26        |
| Enter the Main Page.....                  | 28        |
| Camera Main Page.....                     | 31        |
| System Settings.....                      | 46        |
| Basic Settings.....                       | 46        |
| <b>System</b> .....                       | <b>46</b> |
| <b>Video/Image</b> .....                  | <b>47</b> |
| <b>Audio (Sound)</b> .....                | <b>53</b> |
| <b>User(User)</b> .....                   | <b>54</b> |
| <b>Network (Network Settings)</b> .....   | <b>56</b> |
| Network.....                              | 56        |
| Streaming .....                           | 57        |
| PPPoE .....                               | 57        |
| DDNS.....                                 | 59        |
| UPnP .....                                | 60        |
| SMTP Server.....                          | 62        |
| Samba.....                                | 63        |
| Multicast .....                           | 65        |
| <b>Date/Time</b> .....                    | <b>67</b> |
| <b>IP Filter</b> .....                    | <b>68</b> |

|                                             |           |
|---------------------------------------------|-----------|
| Application Setting .....                   | 69        |
| <b>Event</b> .....                          | <b>69</b> |
| <b>Motion Detection</b> .....               | <b>77</b> |
| <b>Firmware upgrade</b> .....               | <b>78</b> |
| <b>Factory Default</b> .....                | <b>83</b> |
| <b>Reboot</b> .....                         | <b>84</b> |
| Attachment A: External Alarm.....           | 86        |
| Attachment B: Bandwidth Estimation .....    | 88        |
| Attachment C: Troubleshooting and FAQs..... | 89        |
| FCC Class B Announcement .....              | 93        |

# Package Contents

Make sure you have received the following items. If any item is missing, please contact your dealer.

## Camera Unit Pack



1. Speed dome camera

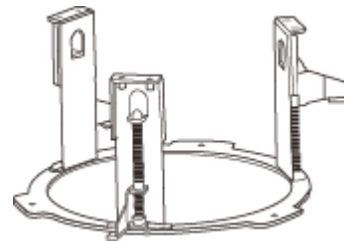


2. Network module base

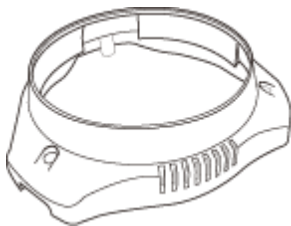
## Accessory Pack



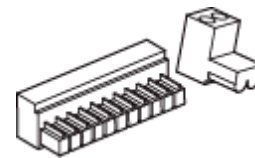
3. Optical cover



4. Inserting holder



5. Decorative rim

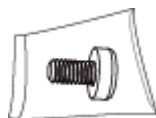


6. Alarm and power connector

## 7. Screw Pack



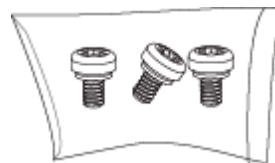
Pack A



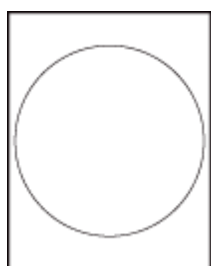
Pack B



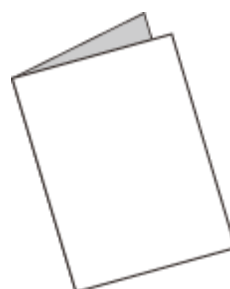
Pack C



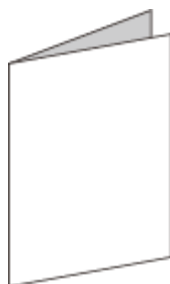
Pack D



8. Inserting opening sample sheet



9. Quick Installation Guide



10. Hardware Installation Guide



11. CD ROM (Manual/Software)

# System Requirements

|                                         |                                                                                                        |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------|
| ALC-9451 Network Speed Dome Camera      |                                                                                                        |
| Network Environment                     |                                                                                                        |
| LAN                                     | 10/100M Ethernet                                                                                       |
| Monitoring system resource requirements |                                                                                                        |
| Operating system                        | Windows 2000 Professional SP4 , XP Home SP2                                                            |
| Browser                                 | Internet Explorer 6.x or later versions                                                                |
| System hardware                         | CPU: Pentium 4, 2.4GHz or better<br>RAM: 512MB (1GB recommended)<br>VGA resolution: 1024x768 or higher |

# Introduction

This product is a speed dome camera that can connect to Ethernet, LAN, and any broadband networks. Unlike traditional CCTV cameras, a CPU and a webpage server are built in the speed dome camera to provide a professional remote monitoring function for the user. This camera provides a 360° quick rotation monitoring and an intelligent image detection system that automatically locks on target and enlarges the image when an abnormal object is detected. This product is professional, cutting edge monitoring equipment.

## Features and advantages

The speed dome camera can operate independently without the need for any other hardware or software. After the camera is connected to the network, the remote monitoring can be achieved via the IE browser (version 6.0 or above) of a computer to provide the best security.

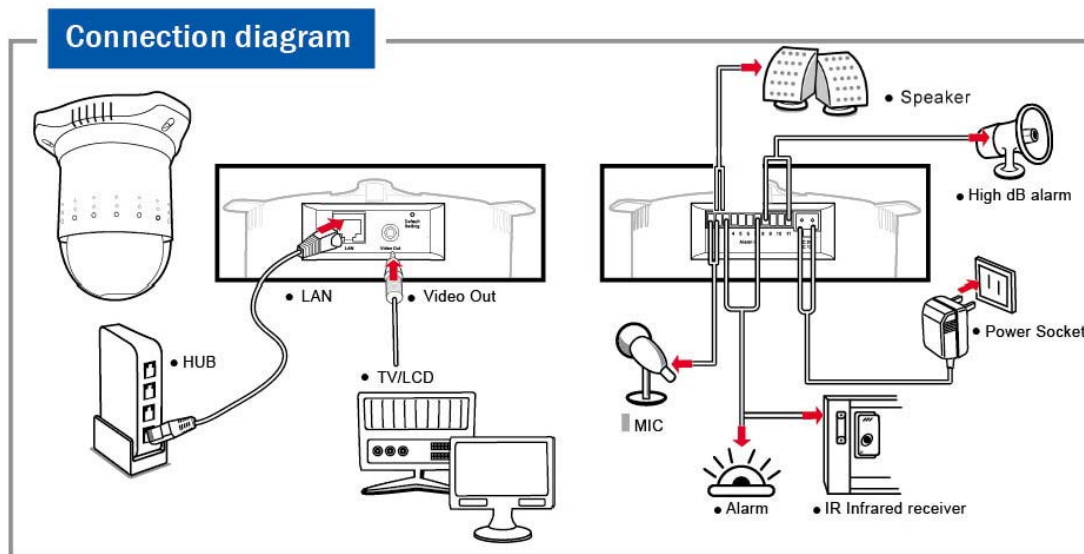
The camera has the following features:

- The 1/4" Sony ExView HAD CCD image sensor provides vivid image quality.
- The 18x or 26 x optical zooming camera lenses allows a clearer view from a distance.
- MPEG4/MJPEG dual image compression modes and the dual encoding capability meet different requirements of the user.
- Rotation speed reaches up to 400° per second allowing for quick positioning.
- Automatic surveillance camera can rotate 360° horizontally and 0° - 90° vertically with 64 preset positions.
- The intelligent dynamic image detection function can automatically monitor abnormal situations and make instant response according to the setting.
- The built-in webpage server allows an easy access via networks.
- Dynamic IP and DNS are supported. The camera can operate in a setting without any static IP.
- User permission can be set based on different levels to ensure the security of the camera and protection of the property.
- The simple and clear design is suitable for airports, train stations, office buildings, large gymnasiums, warehouses, factories, shopping malls and schools.

# System Introduction

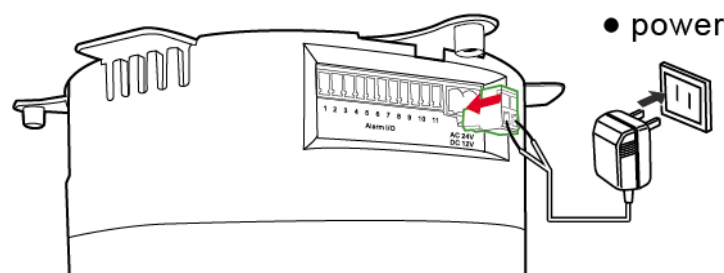
1. AC/DC power inlet: This product supports both alternate current (AC24V/1.0A) and direct current (DC12V/2A). Please connect the product to a power supply. The power input of this product is non-polarized. The product can automatically determine the type of the incoming current.
2. Ethernet connector: An RJ-45 connector is provided for connection to the 10Base-T Ethernet cable or 100 Base-T High Speed Ethernet cable. This port can automatically detect or coordinate the transmission rate of the network.
3. Use a video/audio output cable for external video/audio transmission if required.

## Wiring of the product



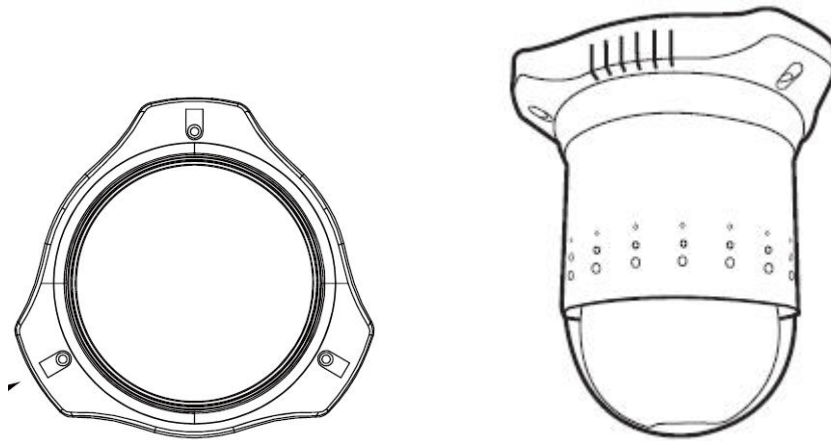
## **AC/DC power inlet**

Please connect the product to a power supply from the AC/DC Power Inlet. The power inlet of this product is non-polarized. The product can automatically determine the type of the incoming current.



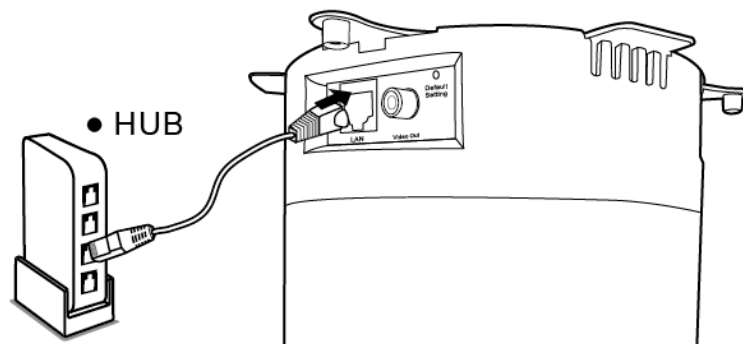
## **Decoration Cover**

The decorative cover can adorn the screw holes and wire connectors while secured to the ceiling.



### LAN socket

Please connect the product to your network from the LAN socket.

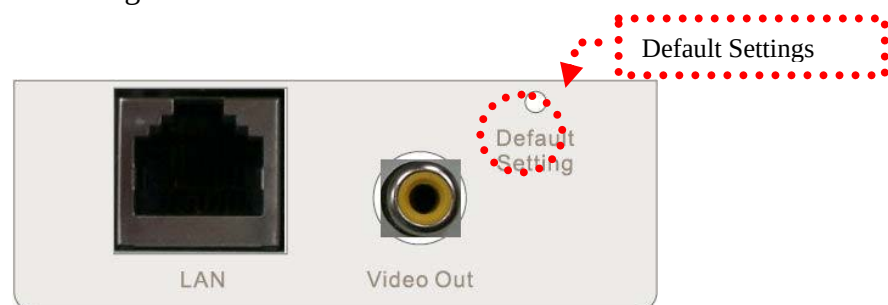


### External alarm connector (DI/DO)

See Appendix A for details of DI/DO.

### Default settings

After booting up the system, press and hold the button for 5 seconds to reset the product to its default settings.



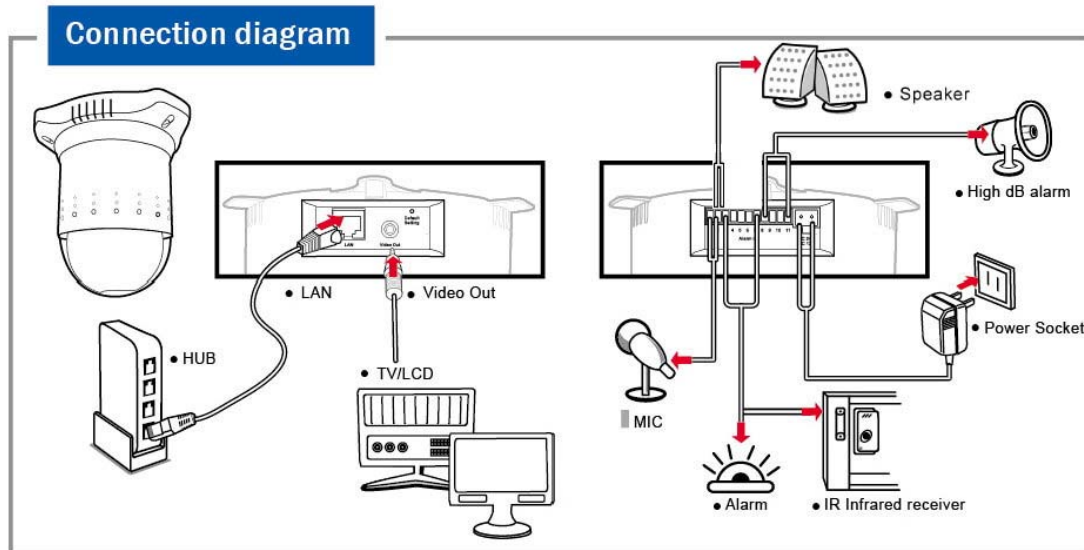
# Hardware Installation

## Important Safety Precautions

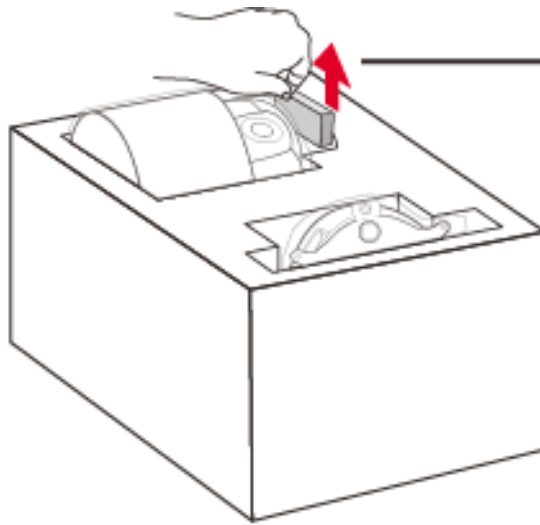
1. Please carefully read the instructions before installation.
2. Keep the manual for future use.
3. Pay attention to all warnings on the equipment and in the manual.
4. Follow all instructions and operation procedures.
5. Turn off the power before wiping the camera. Liquid or cleaner spray is not allowed.
6. Must use the recommended accessories to avoid failure.
7. Use the power supply and voltage as recommended in the manual.
8. Avoid the intrusion of foreign matters into the equipment to avoid failure.
9. Do not install the camera on an insecure holder, wall or ceiling to avoid damage to personnel and equipment.
10. Do not open the protective cover to avoid electric shock or other hazards.
11. Do not attempt repairs by yourself. Otherwise, electric shock might occur or the warranty may become invalid. Please contact us if there is any problem with the product.
12. Only replace with approved parts. Unapproved replacements may bring about damage to the equipment.
13. Only use this camera indoors. Exposure to the rain or humidity may damage the equipment.
14. Protect the camera from falling or shock.
15. Do not touch the lens when the camera is operating. Otherwise, the equipment might fail.
16. Do not install the camera in an environment with extreme temperatures.
17. Do not install the camera at the place where flammable or corrosive gas exists.

The hardware installation instructions below are intended to provide all required knowledge regarding installation of the camera. As for the setting of the network and the description of the interface, refer to User's Manual.

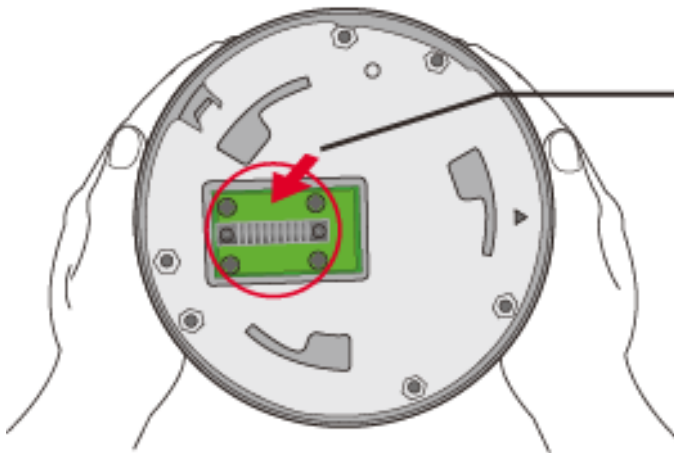
**Notice: Use of the camera must comply with local laws and regulations.**



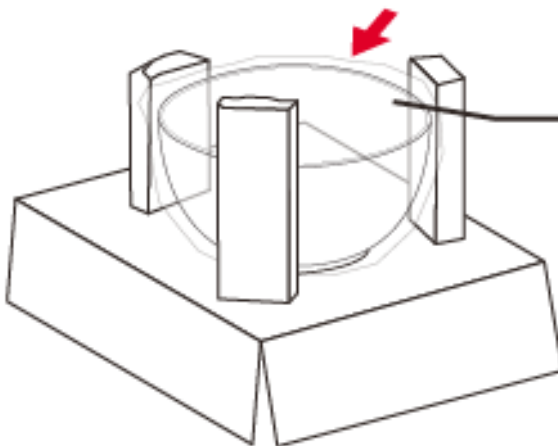
## Notice for unpacking



Take out the lens protection pad for easier removal of the PTZ Dome Camera from the box.

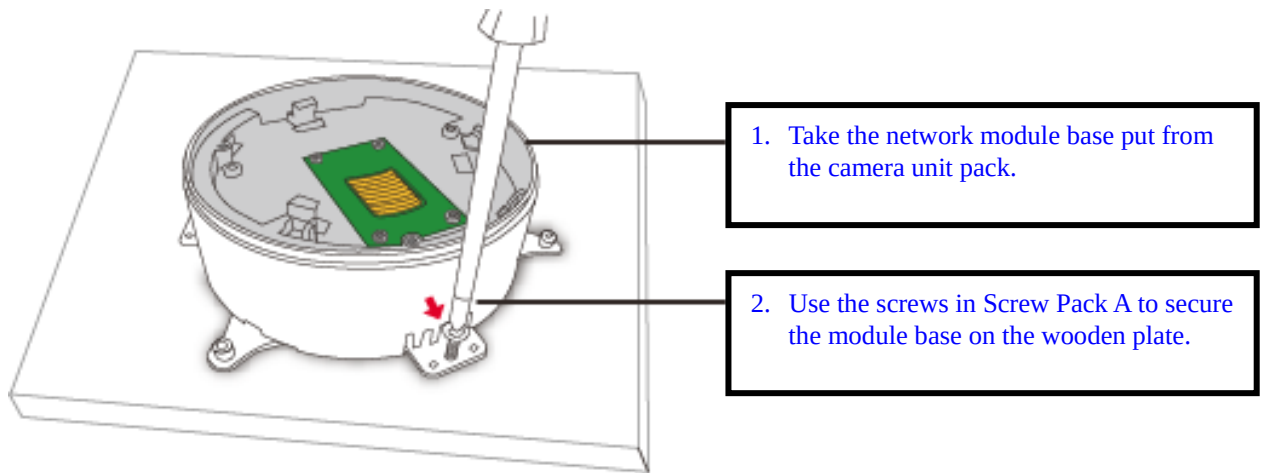


Do not put the equipment on a firm surface, or the protruding metal connector beneath the camera will be damaged. It is recommended to keep the camera in the package box before the installation begins.

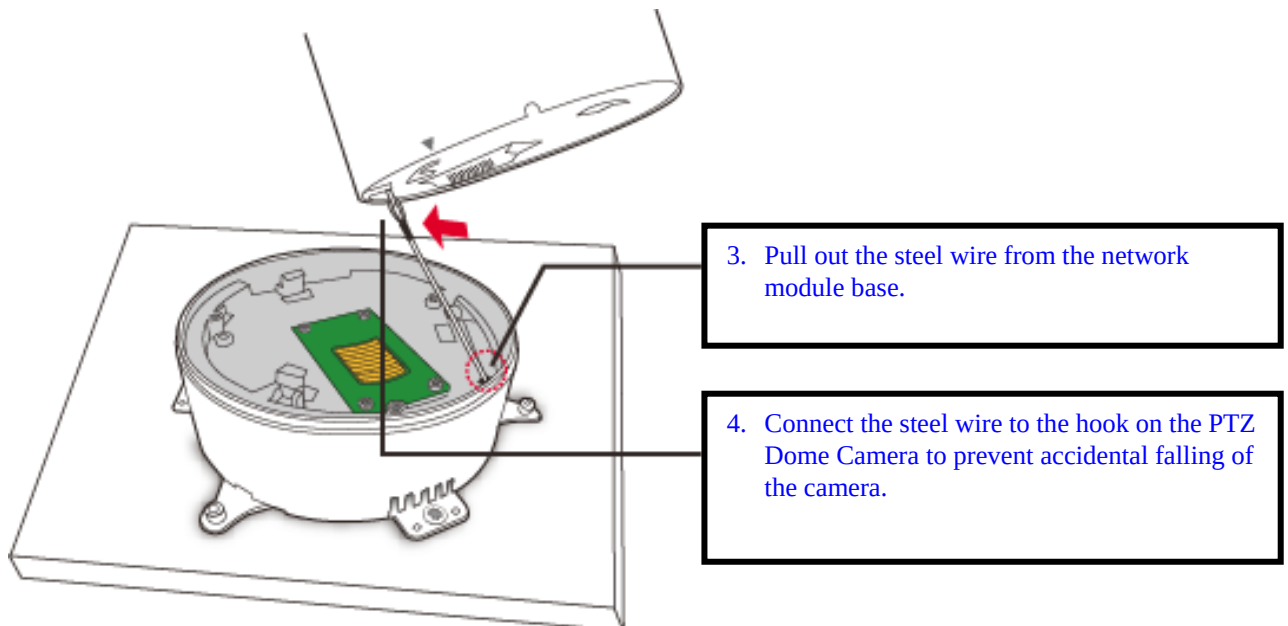


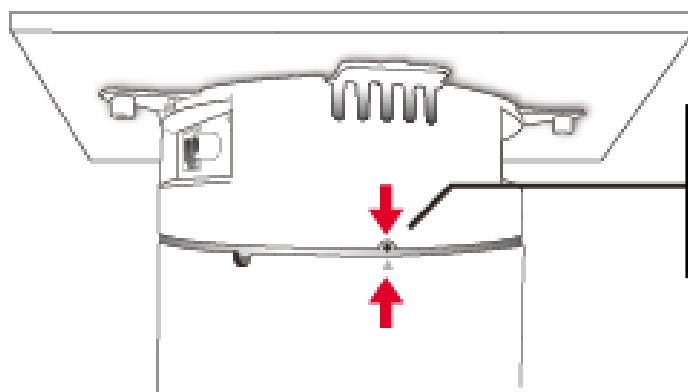
Take out the items from the accessory pack, but do not remove the outer packaging of the optical cover.

## Ceiling Installation Procedure

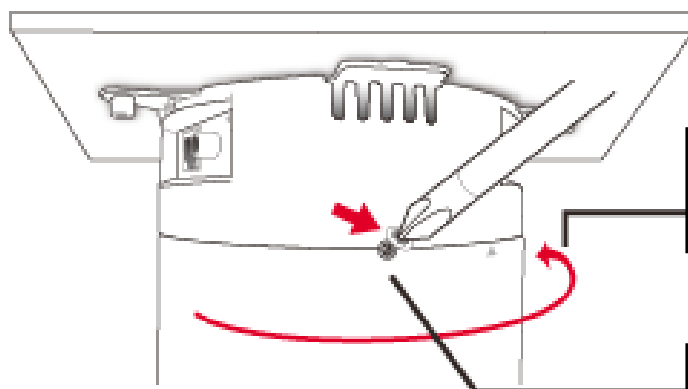


**Note: Do not affix the camera on a ceiling made from fragile material, such as gypsum, calcium carbonate, magnesia, PU, PVC, and glass. The thickness of the wooden plate should be at least 1.5 cm. If the camera is to be fixed on a concrete or brick surface, suitable setscrews should be prepared by the user. For convenience of the installation, the wooden plate can be removed from the ceiling in advance and assembled back after the network module is fixed.**



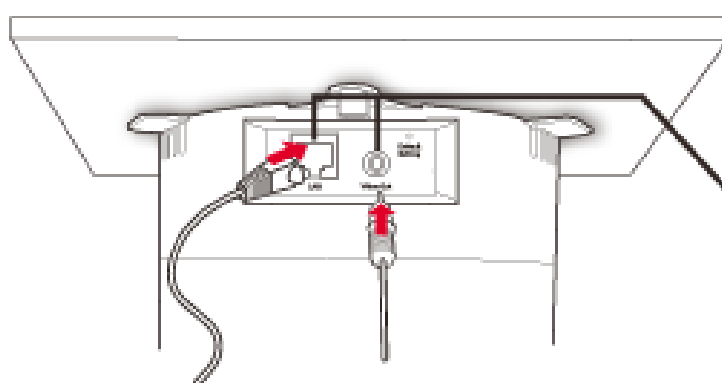


5. Align the arrow on the PTZ Dome Camera with the screw hole on the network module base.

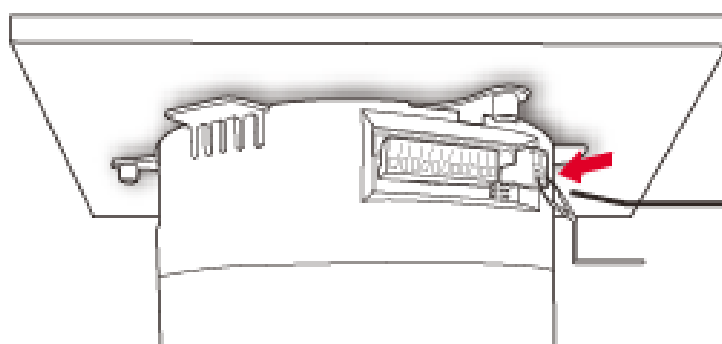


6. Turn the PTZ Dome Camera to the right until both screw holes are aligned.

7. Use the screws in Screw Pack B to secure the camera.

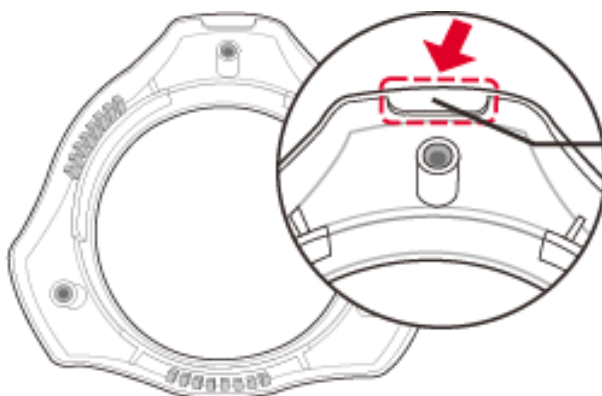


8. Plug the network cable. Connect the video terminal if analog video output is required.

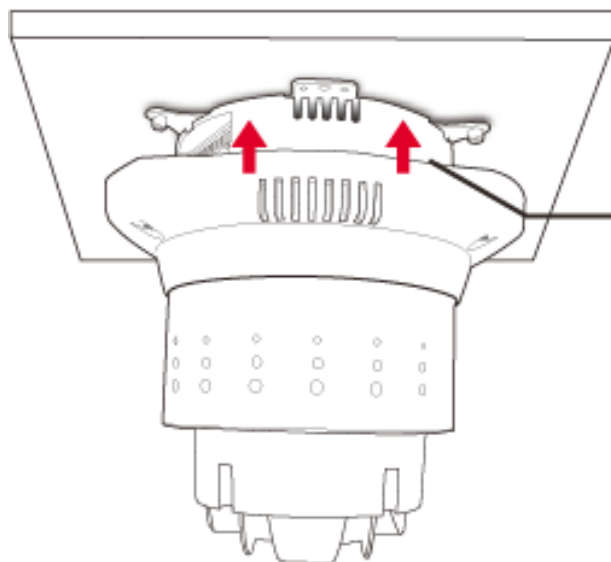


9. Connect the power cable and, if required, the alarm input /output lines and microphone cable.

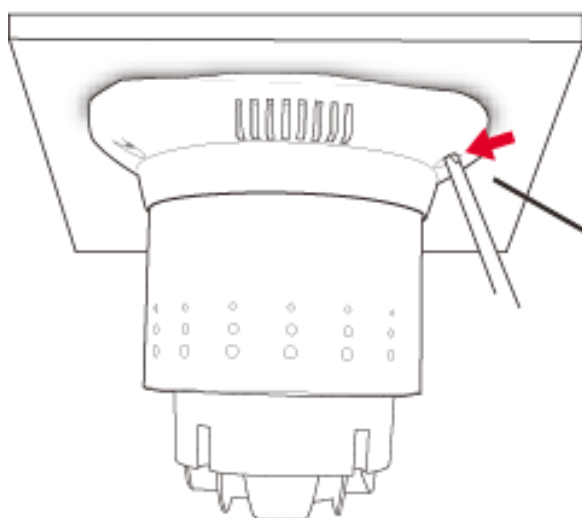
**Note:** The power input must be 24V AC 1A or 12V DC 2A. It is not guaranteed that the camera can operate using other voltages and a voltage beyond the specified range may damage the equipment. As for setting of the alarm input/output and description of the circuit, please refer to the User's Manual.



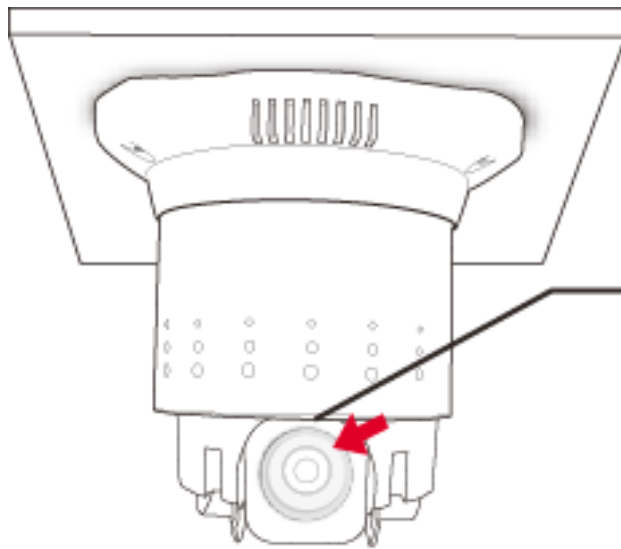
10. Remove the decorative rim from the accessory pack. Cut the edge as shown if it is necessary to pull out wires inside the rim.



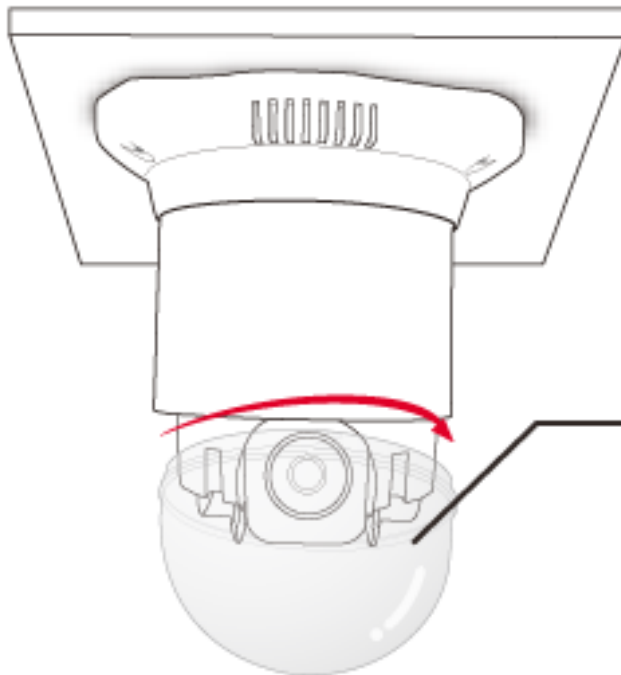
11. Mount the decorative rim onto the network module base and notice the position of the outlet hole.



12. Use the screws in Screw Pack D to secure the rim to the base.



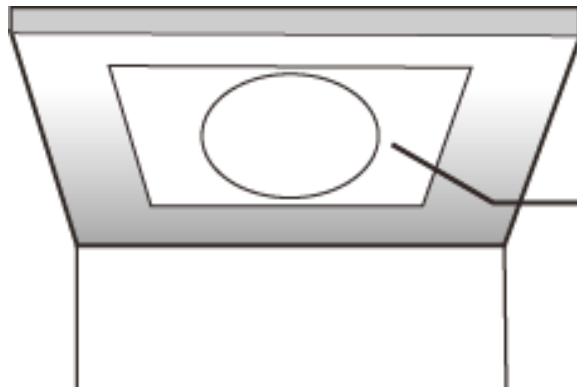
13. Remove the lens protection cover.



14. Remove the outer package of the optical cover and align the optical cover with the gap of the PTZ Dome Camera. Close the cover and turn right till secured. Finally, remove the protection film and avoid fingerprints on the cover.

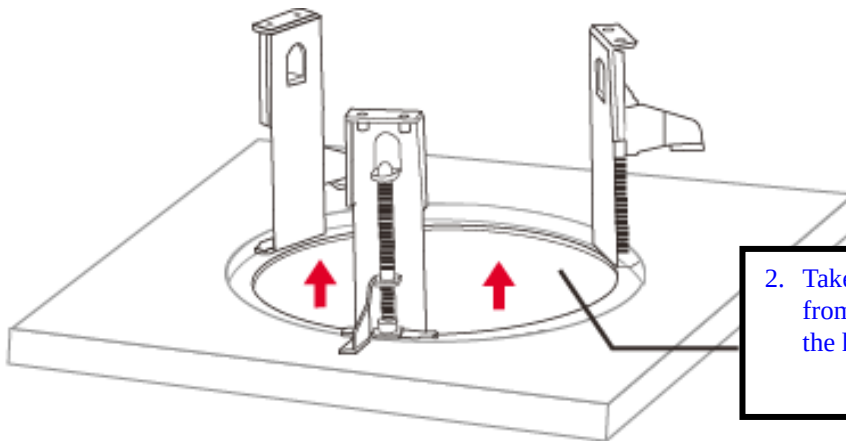
**Note:** While installing, be careful not to scratch or leave fingerprints on the optical cover. Gloves are recommended for installation. Dust may accumulate on the optical cover after it is used for a period of time and affect the image quality. A high-pressure gas spray can be used to remove the dust. If the dust accumulation is severe, remove the optical cover, clean with water, dry and wipe it carefully with a wiper (optical lens wiper). It is not allowed to use any harsh solvents to clean the optical cover. A new replacement is available if the optical cover is damaged to affect the image quality.

## Inserting Installation Procedure

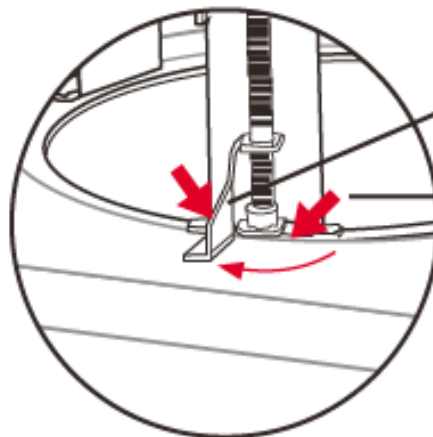


1. Take the opening sample sheet out from the accessory pack and draw a circle on the material according to the opening sample sheet. Use an appropriate tool to open a hole.

**Note: Do not affix the camera on a ceiling made from fragile material, such as gypsum, calcium carbonate, magnesita, PU, PVC, and glass. The thickness of the wooden plate should be at least 1.5 cm.**

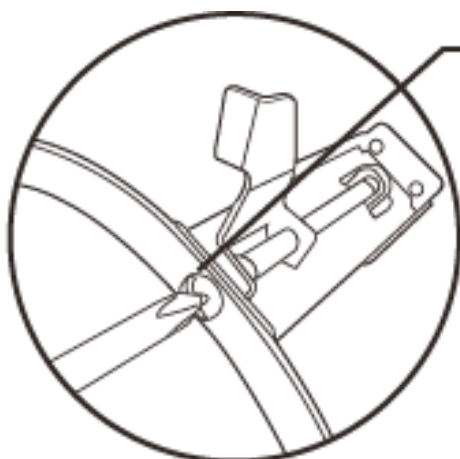


2. Take the Push the inserting holders out from the accessory pack and push them into the hole.



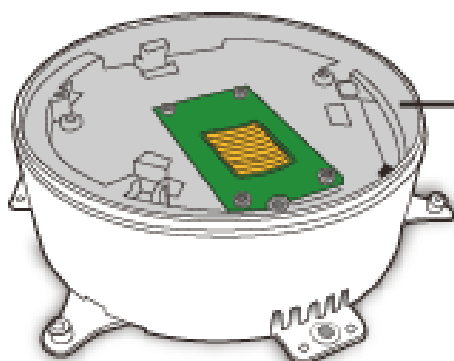
3. Open the leg to 90° and keep it perpendicular to the wooden plate.

4. A hole of the correct size allows the inserting holder to pass through the opening and stop at the loop. If the opening is too small, the holder cannot pass through; too large, the overall beauty will be affected (gaps around the holder).

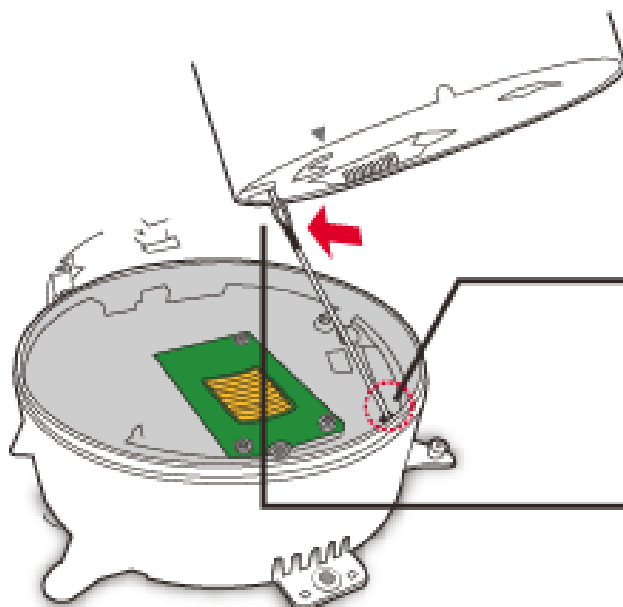


5. The adjusting screw determines the height of the PTZ Dome Camera beneath the ceiling. Turn the screw clockwise to extend the camera, or turn the screw counterclockwise to draw back the camera.

**Note:** When the inserting installation method is adopted, the three legs carry the total weight of the camera. Thus, they should be firmly secured to avoid damage to the equipment and personnel. If the surface to which the legs are secured is not level, adjust the adjusting screw of each leg to level the camera.

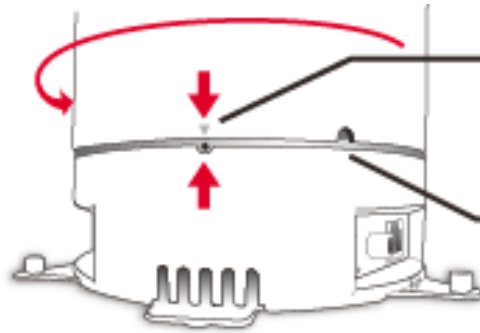


6. Take the network module base out from the camera unit pack.



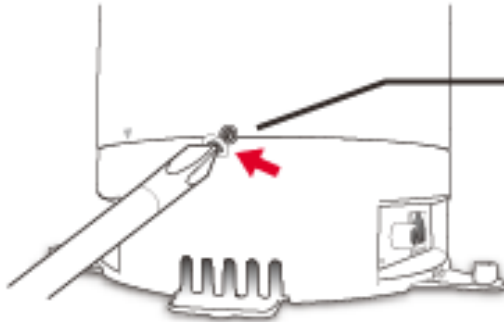
7. Pull the steel wire out from the base.

8. Connect the steel wire to the hook on the PTZ Dome Camera to prevent the accidental falling of the camera.



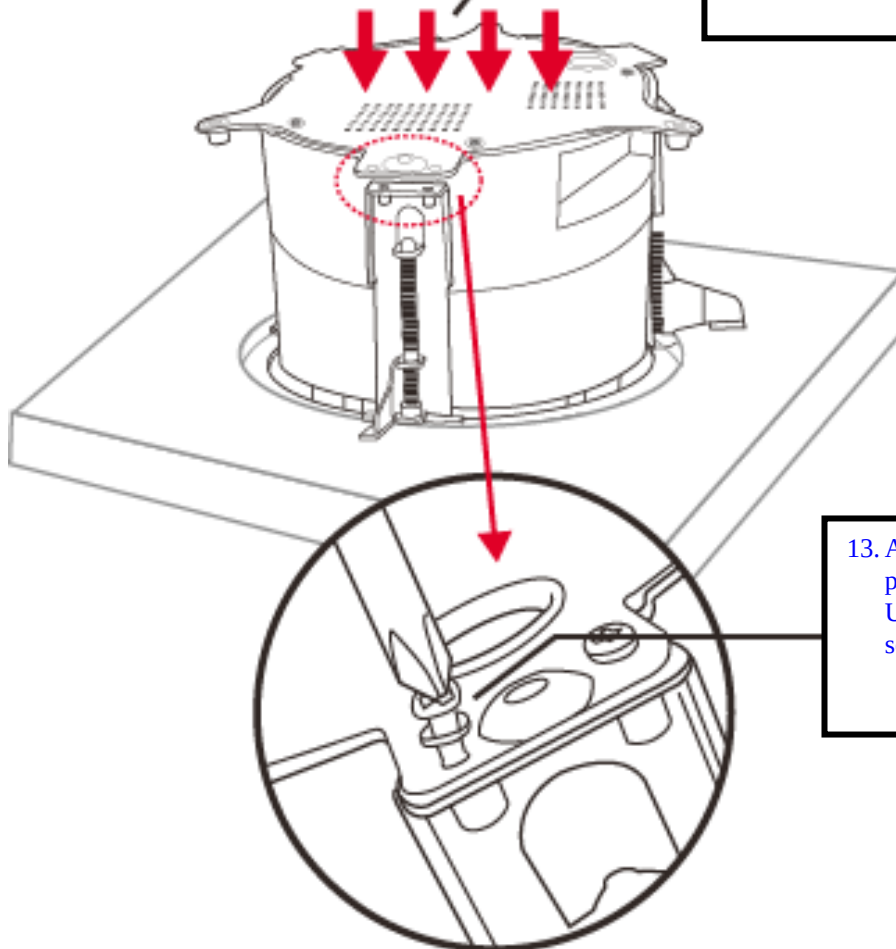
9. Align the arrow on the PTZ Dome Camera with the screw hole on the network module base.

10. Turn the PTZ Dome Camera to the left until both screw holes are aligned.

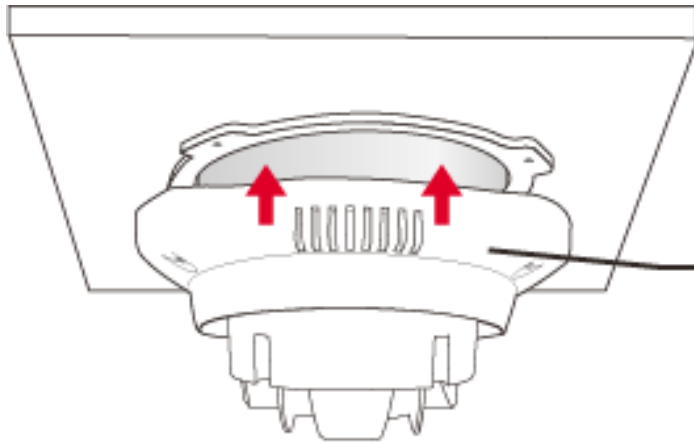


11. Use the screw in Screw Pack B to secure the camera.

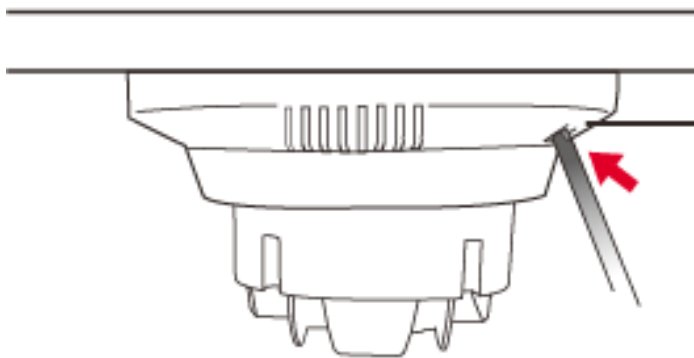
12. Inserting the assembled PTZ Dome Camera and network module base into the inserting holder slowly from top to the bottom.



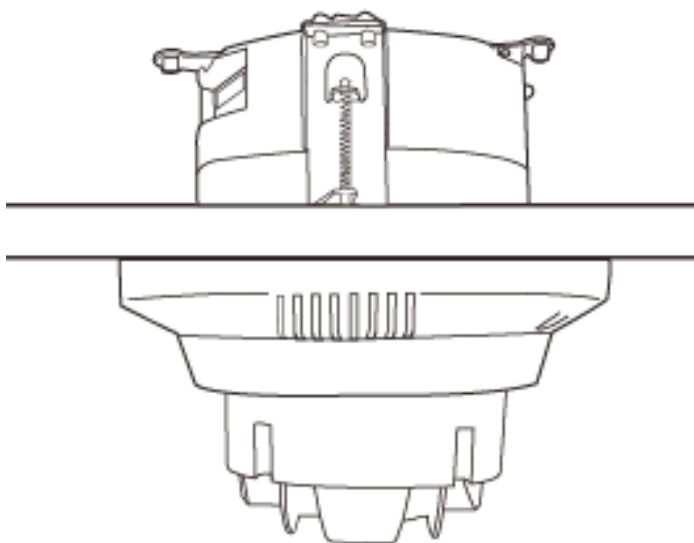
13. Align with the three supporting pillars of the inserting holder set. Use the screws in Screw Pack C to secure the camera.



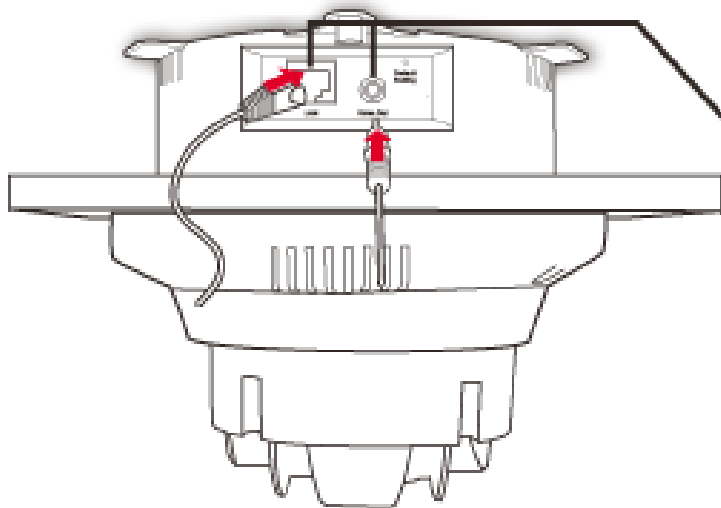
14. Mount the decorative rim onto the network module base and notice the position of the outlet hole.



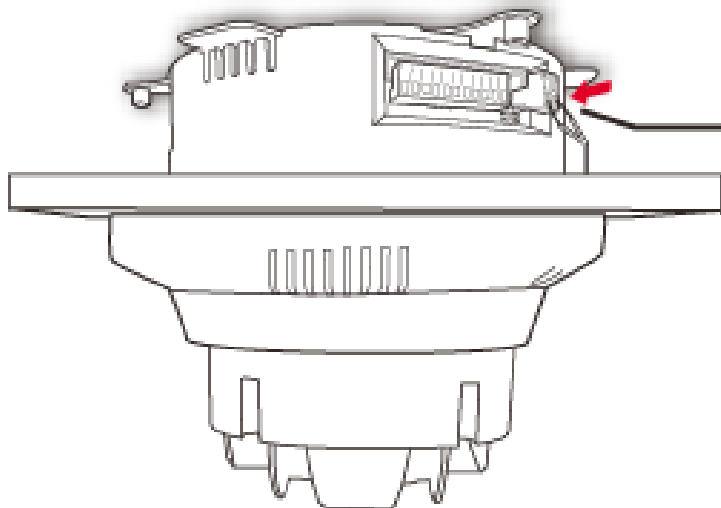
15. Use the screw in Screw Pack D to secure the rim to the base.



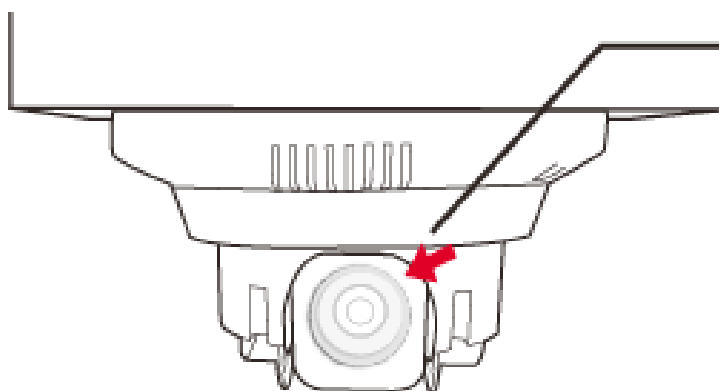
16. Illustration of the completed inserting installation.



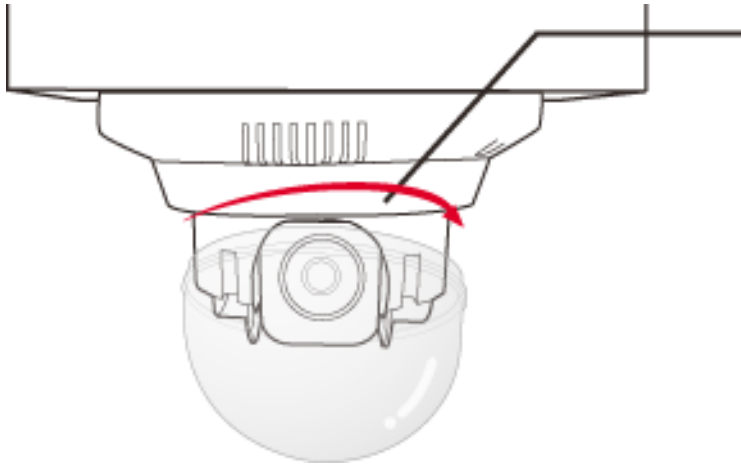
17. Plug the network cable. Connect the video terminal if analog video output is required.



18. Connect the power cable and, if required, the alarm input /output lines and microphone cable.



19. Remove the lens protection cover.



20. Remove the outer packaging of the optical cover and align the optical cover with the gap of the PTZ Dome Camera. Put the cover to its position, turn right to the end, and remove the protection film. Do not leave any fingerprints on the cover

**Note:** While installing, be careful not to scratch or leave fingerprints on the optical cover. Gloves are recommended for the installation. Dust may accumulate to the optical cover after prolonged use and affect the image quality. A high-pressure gas spray can be used to remove the dust. If the dust accumulation is severe, remove the optical cover, clean with water, dry and wipe it carefully with a wiper (optical lens wiper). It is not allowed to use any harsh solvents to clean the optical cover. A new replacement is available if the optical cover is damaged to affect the image quality.

### **Important!!**

1. Users should carefully read the attached Hardware Installation Manual to avoid damage to the equipment and personnel.
2. If you want to hang the camera from the ceiling, please do not affix this product to the asbestos plate on the lightweight steel frame. The fragile asbestos plate might not be capable of holding the weight and the camera may fall from the ceiling to injure personnel or damage the equipment. It is recommended to secure the camera on a rigid surface, such as wooden plate, concrete, metal surfaces. The attached screws are used for wooden plate. Please use other appropriate screws if the camera is to be secured to a surface made from different material.
3. When using a screw to fix the camera to the ceiling, please protect your eyes from falling screws.
4. Reminder, you can fix the camera to the ceiling after setting the camera.
5. Do not forget to clean and maintain the camera -  
Dust may adhere to the optical cover after prolonged use and affect the image quality. Remove the optical cover, clean with water, dry and wipe it carefully with a wiper (optical lens wiper).

After completion of the hardware installation:

1. **Connect the network cable**  
Connect one end of the network cable (not supplied) to the network port on the rear panel. Connect the other end to the network equipment of the user.
2. **Connect to power supply**  
Connect the power supply (not supplied) to the power inlet. The camera will automatically rotate. It takes about 40 seconds to activate the camera.

# Camera Settings

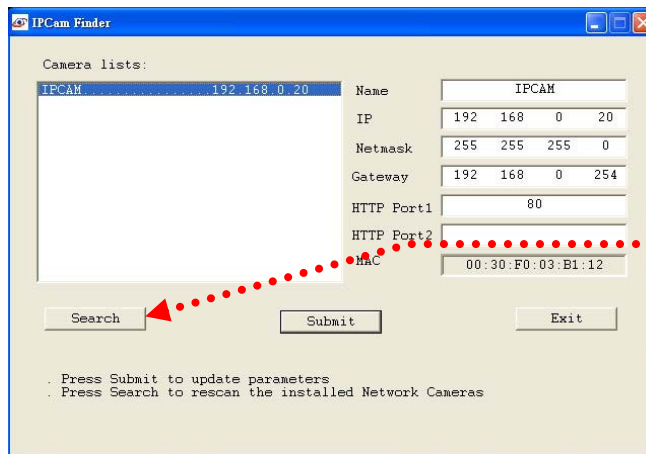
After the hardware has been installed, insert the supplied CD in the computer and execute the file IP Finder.exe following the steps below to search for and change the IP address of the camera.

## 1. Start the machine.

Execute the IP Finder.exe from the supplied CD.

## 2. Find the camera (Search)

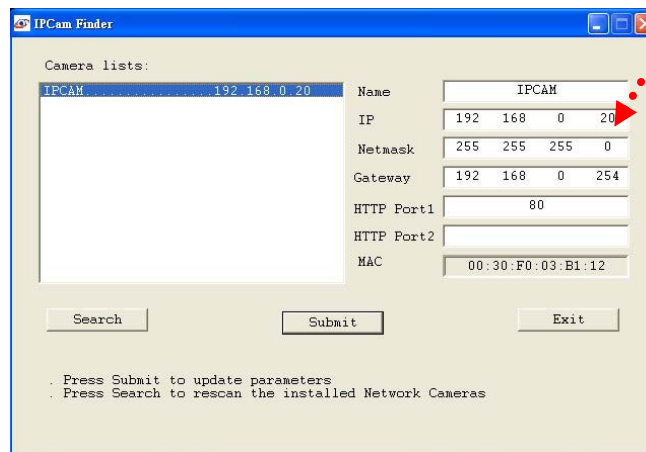
Search for the product from your LAN. The factory IP setting 192.168.0.20 appears on the screen.



1. Click Search to find the IPCAM on the LAN.

## 3. Changing the IP address and related settings for the network environment

When you find the camera, click it and the settings will appear on the right side. Change the settings for the new network environment you need.

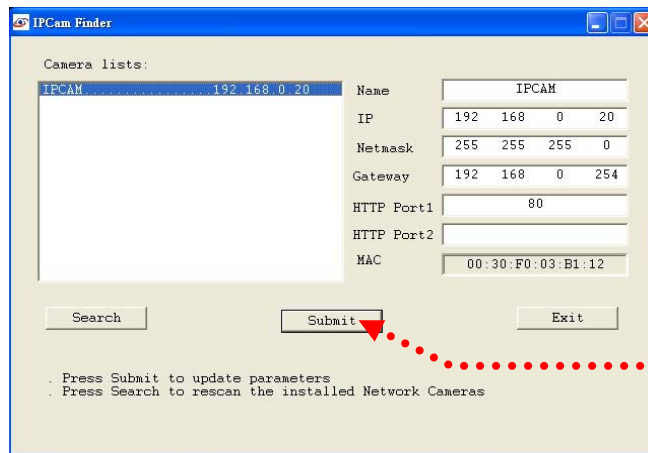


2. Enter the settings for the new network environment you need.

※ You must enter new settings in the IP, Netmask and Gateway fields and keep the settings in other fields unchanged.

## 4. Submit data (Submit)

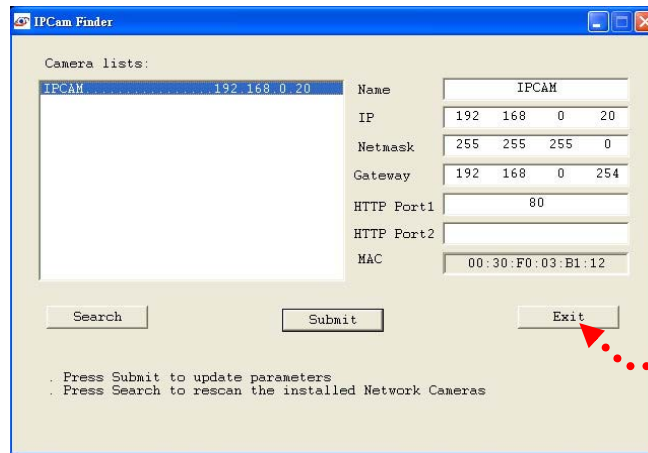
Click Submit to validate new settings.



3. Click Submit to validate new settings.

## 5. Confirmation

When all changes have been confirmed, click “Exit” to quit.



4. When all changes have been confirmed, click Exit to quit.

### Notes:

1. The IP FINDER can only find the IP addresses of cameras that share the same hub on the LAN. For information about finding IP addresses on the Internet, refer to the “DDNS Setting”, or “UpnP Setting”.
2. All UIC camera/network server products can be found and changed using the IP FINDER software.
3. If the IP FINDER software cannot be executed, check your antivirus software or firewall to remove the block.
4. Field description: You can give a name to your camera (such as “PT\_IP” or “PT-IP”). No spaces allowed (such as “PI IP”).  
You can change the settings for IP, Gateway Address and Network Mask to meet the requirements of your network environment. The product uses HTTP Port1 and does not support Port2 settings.

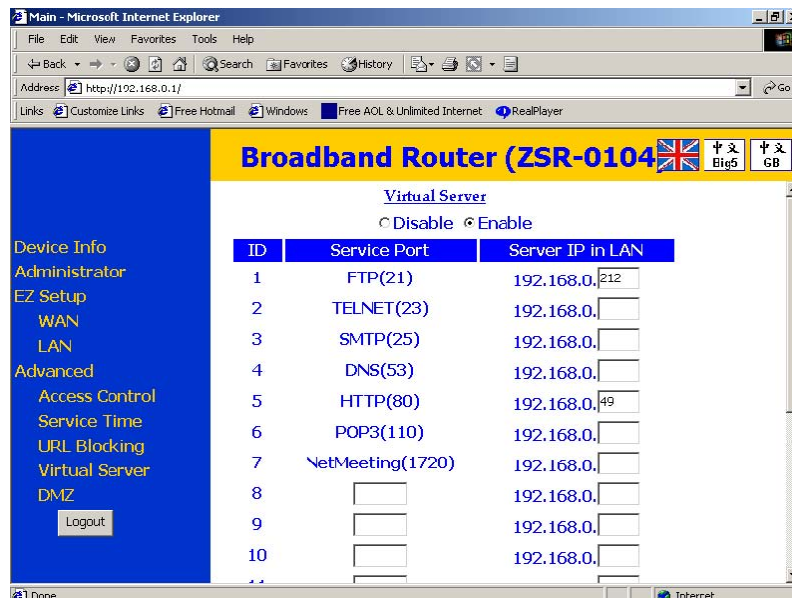
**MAC:** Factory default network identity of the machine.

# Camera Setting from a Router

You can use DHCP when you want to use the camera on the Intranet (LAN). However, the IP must fixed when you want to use the camera on a WAN. For this application, it is required to set up a virtual server on the ADSL router. Follow the steps below to complete the setting:

1. Enter the camera setting page to set a fixed IP. (Refer to the “Network Setting”.)  
Ex.: 192.168.0.49
2. Enter the ADSL router main setting page. Ex.: Zonet ADSL router
3. Enter the Virtual Server setting page.
  - a. Set “mapping of *HTTP Port (80)* to *192.168.0.49*”.
  - b. Restart ADSL router.

After completing the settings, you can operate the camera from a WAN IP Address via the ADSL router.



Example: The Virtual Server setting screen of the Zonet ADSL router

**Note 1:** The virtual server setting screen is not the same for all ADSL routers. Refer to the manual of the ADSL router you purchased for more information about the setting.

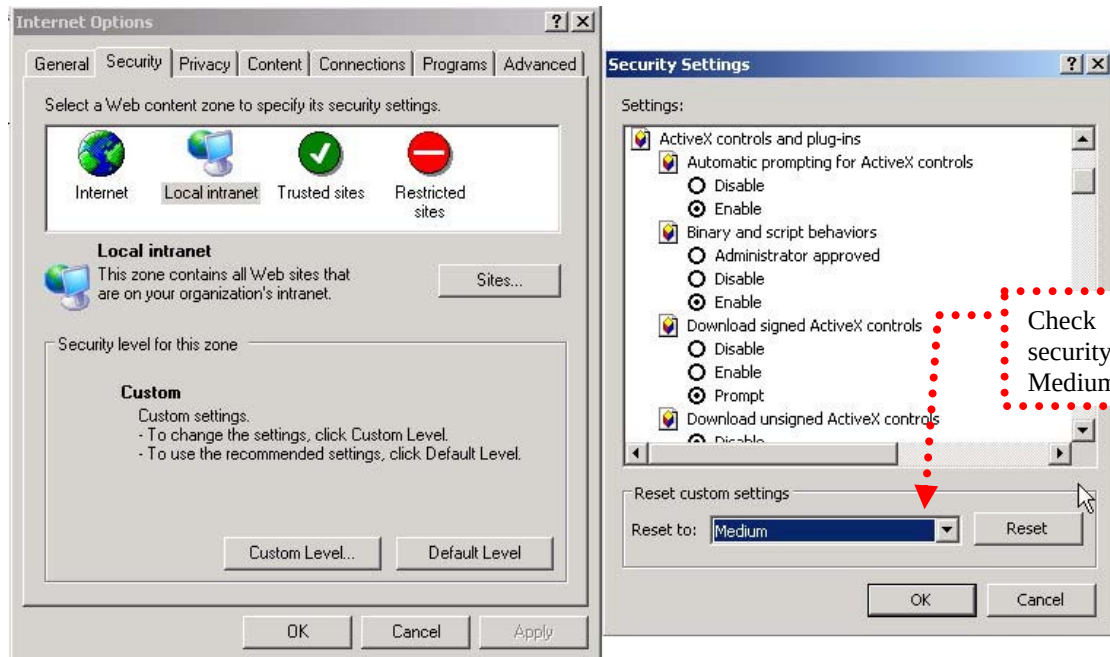
**Note 2:** Not all virtual servers on the ADSL routers support the external control. If possible, use the DMZ function to perform NAT and Firewall penetration. DMZ stands for De-militarized zone. It is a small section of network between the internal network (militarized zone) and the external network. This zone can be sensed and protected by IDS, monitored by the firewall or detected by other safety mechanisms.

# Change the Internet Explorer Setting

This product uses ActiveX Control to play images and sound on your PC. The ActiveX Control application software will be downloaded to your PC when you connect it to the Internet. To ensure successful download of the software, the Internet Explorer "security settings" must be changed accordingly. Make sure that the security level is set to **Medium**, the commonly used default security level.

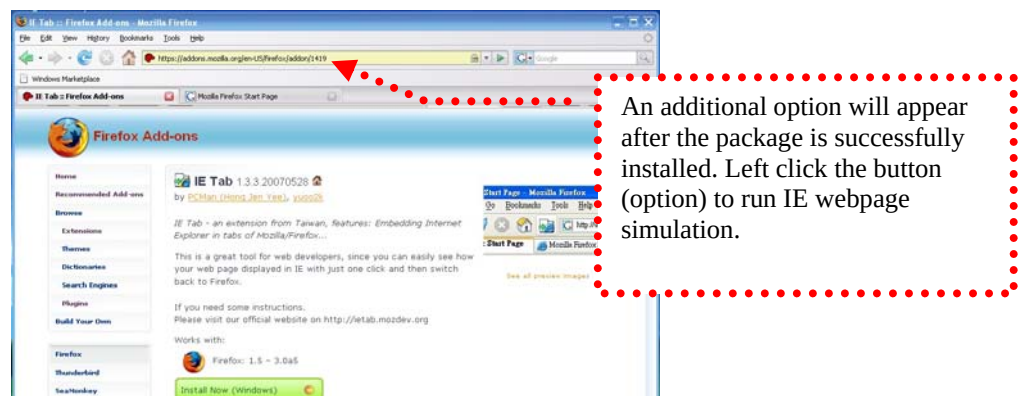
## Steps:

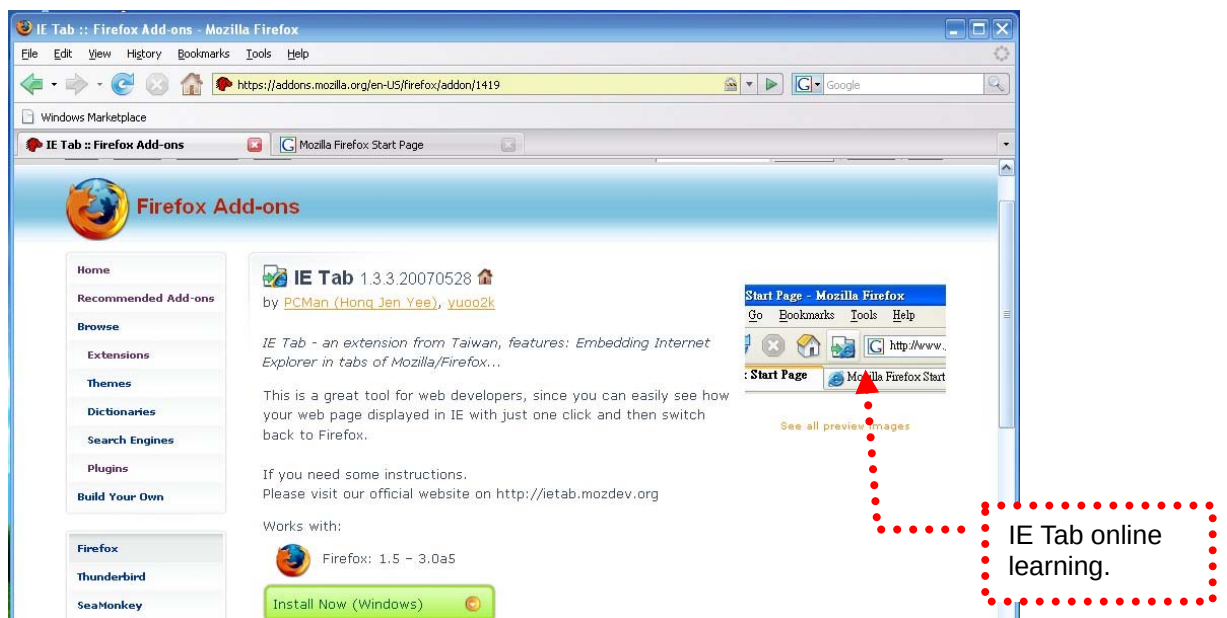
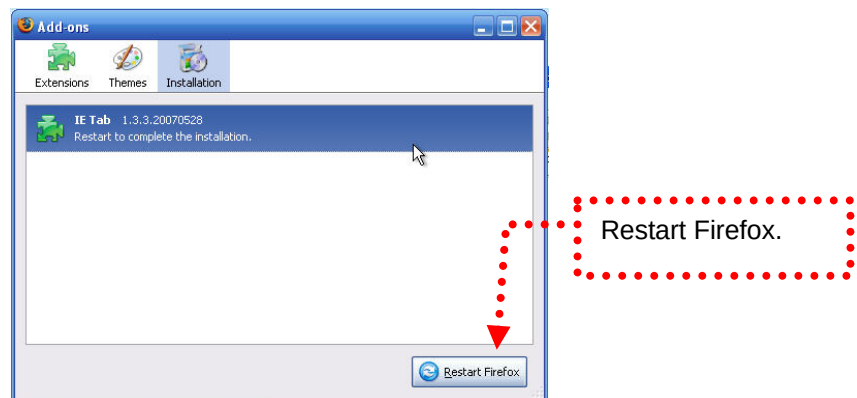
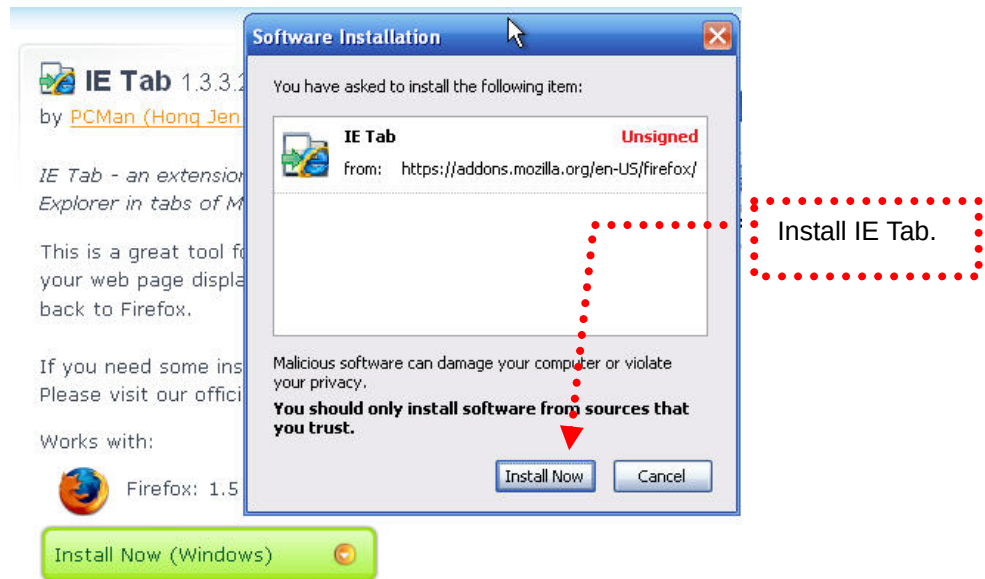
Open the IE browser → Tools → Internet Options → Security → Custom Level



Check the security setting

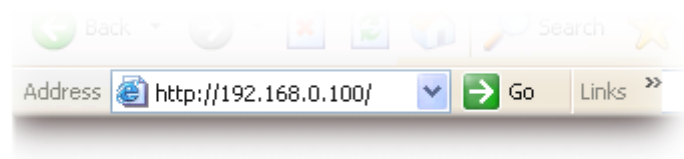
1. This product supports IE 6.0 or above.
2. If you are using Firefox, please download and install the IE Tab kit first from [https://addons.mozilla.org/en-US/firefox/addon/1419vu8\\_y930](https://addons.mozilla.org/en-US/firefox/addon/1419vu8_y930).





# Enter the Main Page

1. Open the IE browser and key in the IP address of the product.



Key in the IP address of the camera



When the login screen appears, key in "root" in the User Name and Password fields. Click OK.

Camera login screen

2. Key in the default "username" and "password".

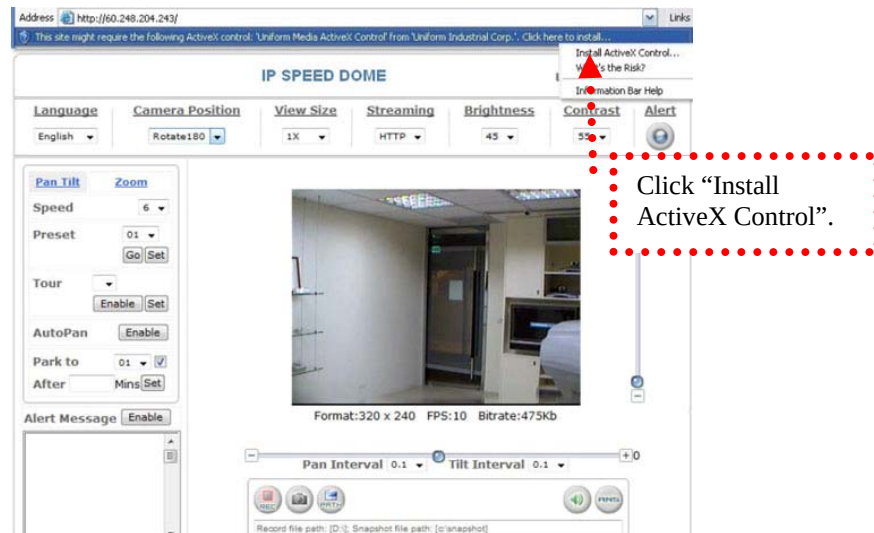
Default User Name: **root**

Default Password: **root**

You can access the camera as an administrator by default and set up for other users or privileges from the "Basic Settings" -> "User".

3. Installation of Internet Explorer ad-hoc components

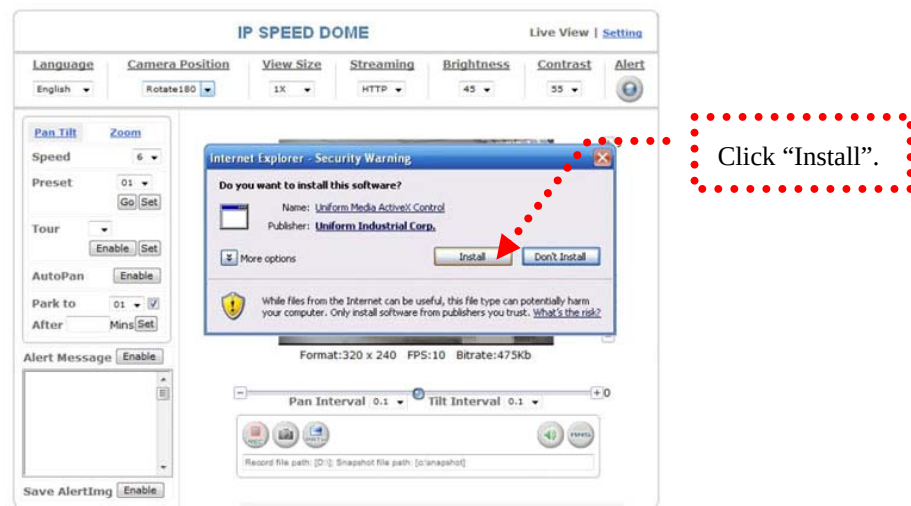
When the username and password are confirmed, a control setup screen pops up under the IE address bar. Click "Install ActiveX Control" to install the controls.



Setup prompt screen

- The security warning screen appears. Click "Install".

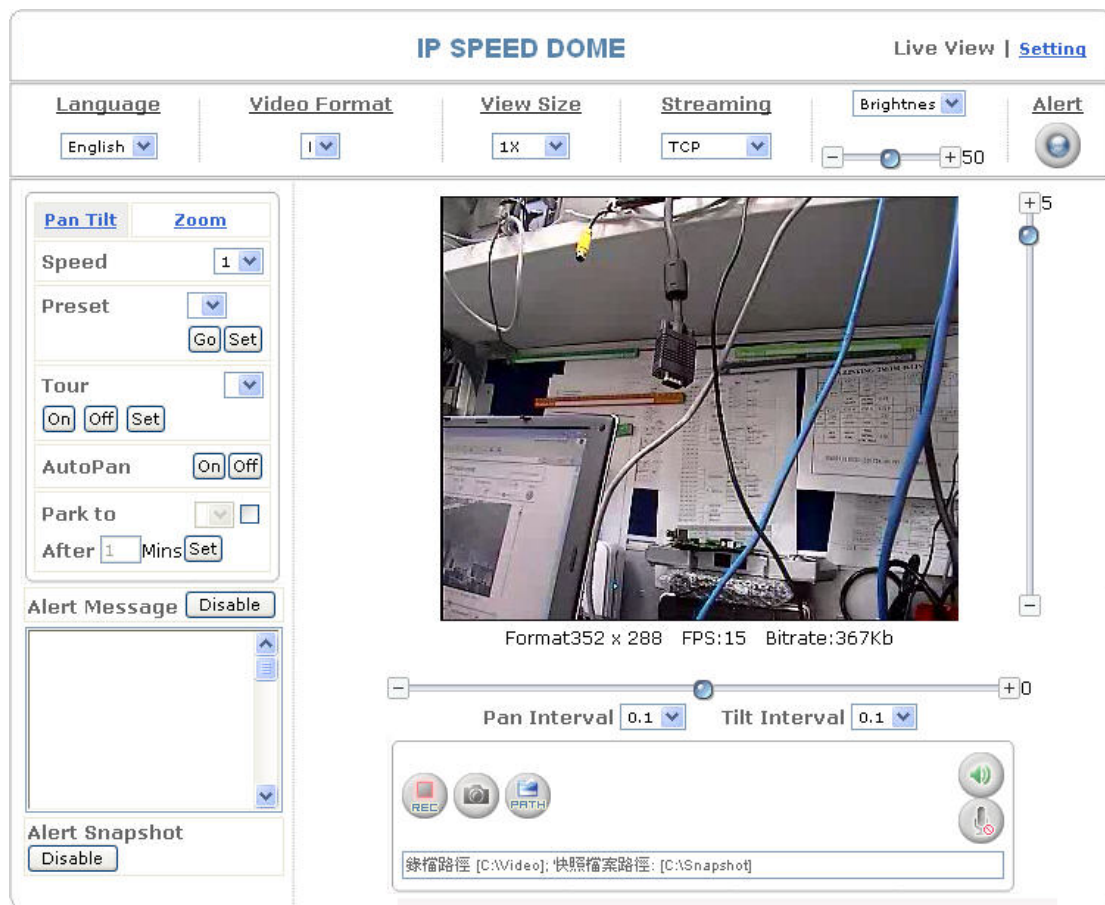
**The ActiveX Control is named "UIC ActiveX Control". This software is owned by UIC and well certified. You can use it without any doubts about its validity.**



- If a firewall block window pops up, select Unblock.



6. When installation of the ActiveX control is completed, the image transmitted from the camera and the operation interface appear on the screen.

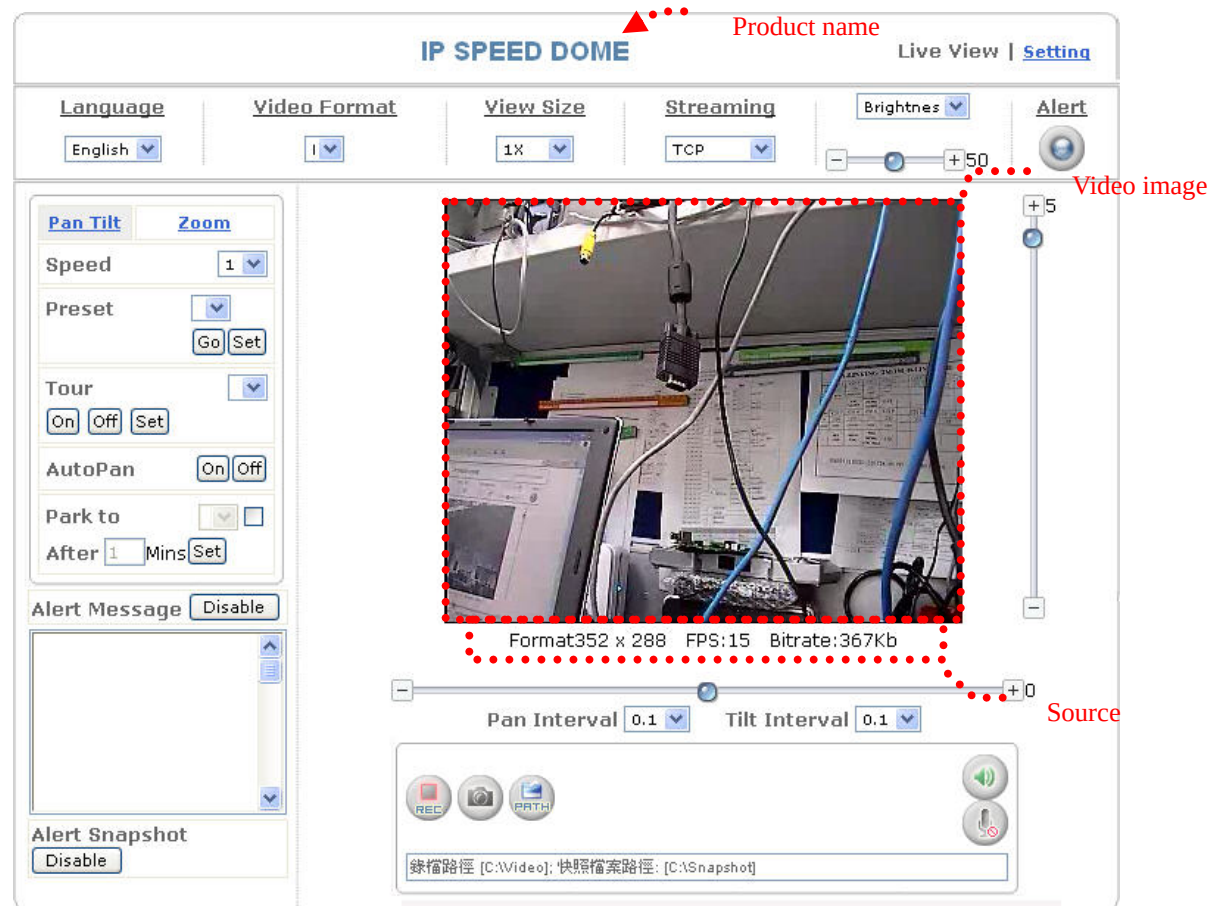


# Camera Main Page

## Descriptions:

Source: Information bar

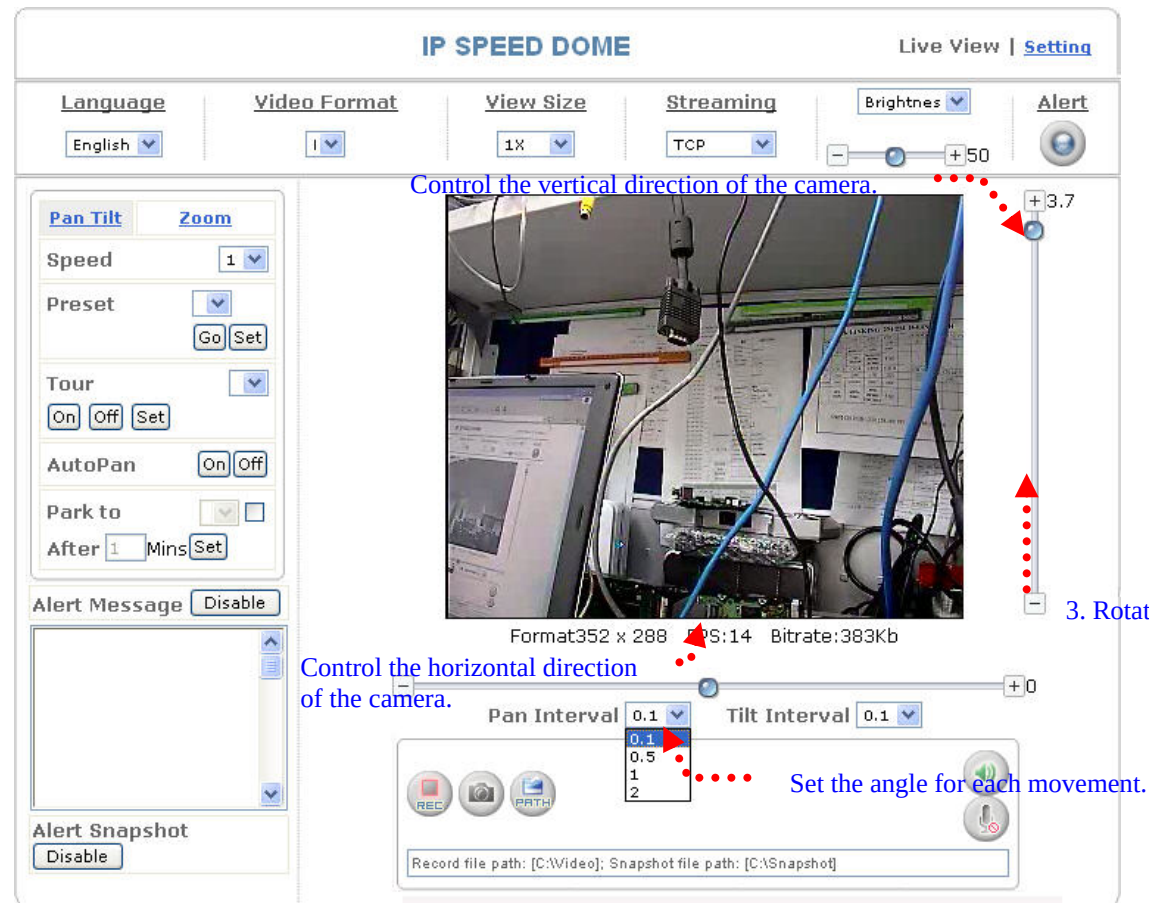
1. Format: resolution of the current video stream
2. FPS: Frame Per Second of the current video stream
3. BitRate: bandwidth per second of the current video stream



**Attention: Please change the streaming setting to HTTP if nothing appears in the image area.**

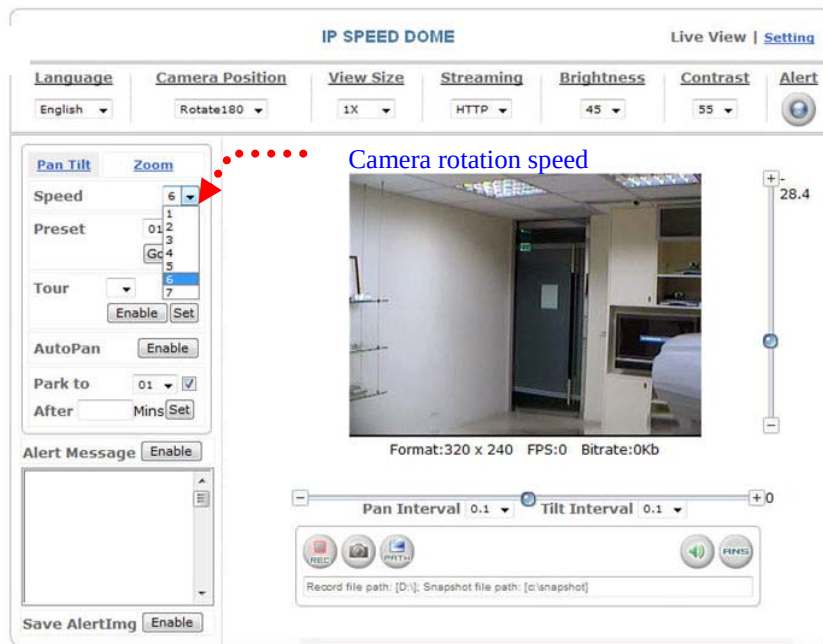
## Control Panel

**1. Pan direction:** This function controls the camera to move up, down, left or right. You can directly drag the small ball on the control bar for quick positioning or click the  or  button at both ends of the control bar to position precisely. When precise positioning is used, you can set the angle for each movement of the camera (refer to the following picture). You can also click the image to control the direction of the camera.

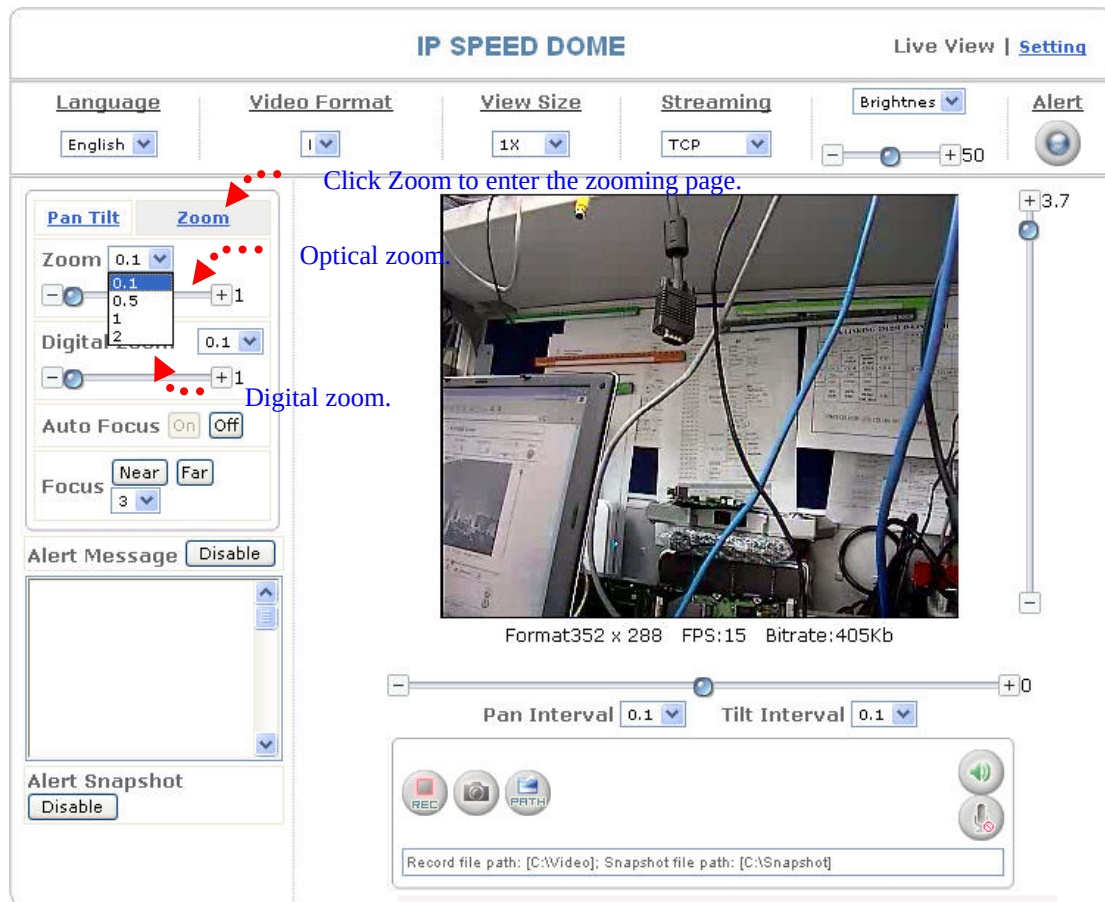


**2. Rotation speed:** This function controls the speed of rotation in the Preset, Tour, and AutoPan modes. 7 options are available. “1” is the slowest and “7” is the fastest speed.

| Speed Option | 1  | 2   | 3   | 4   | 5   | 6   | 7   |
|--------------|----|-----|-----|-----|-----|-----|-----|
| Angle/second | 1° | 16° | 32° | 48° | 64° | 80° | 95° |



3. **Optical ZOOM:** A build-in 18x or 26x optical lens (depending on the camera model) is used for zooming the image. You can directly drag the small ball on the control bar for quick zooming or click the  or  button at both ends of the control bar to zoom precisely. The movement speed of the lens is adjustable.
4. **Digital ZOOM:** The build-in 12x digital zooming function can enlarge the picture. You can directly drag the small ball on the control bar for quick zooming or click the  or  button at both ends of the control bar to zoom precisely. The digital zoom in combination with the optical zoom creates 216x or 312x (depending on the camera model) zooming capability.



5. **Auto Focus:** The default is **On**. You can click **Off** to enter the manual focus mode.
6. **Focus:** In the manual focus mode, you can choose **Near** or **Far** and 7 speed options are available.

**IP SPEED DOME** Live View | [Setting](#)

**Language** English **Video Format** I **View Size** 1X **Streaming** TCP **Brightness** +50 **Alert**

**Pan Tilt** **Zoom**

Zoom 0.1 **Auto Focus** On Off

Focus Near Far

Alert Message

Alert Snapshot Disable

Format: 352 x 288 FPS: 15 Bitrate: 375Kb

Pan Interval 0.1 Tilt Interval 0.1

Record file path: [C:\Video]; Snapshot file path: [C:\Snapshot]

**Manual focus adjustment**

**Auto focus function on/off**

**7. Preset:** You can use this function to preset the location that the camera will rotate to (64 locations).

This function can save the location you want to monitor and the camera will automatically rotate to the saved location when you click the number of that location. Precise positioning can be achieved without the need for manual control.

1. Click **Set** to enter the preset setting window.

2. Enter a name for the location.

4. Click **Update** and then **Exit**.

5. When a location number has been selected, click **Go** and the camera will automatically position to the preset location.

**8. Tour:** This function can enable or disable the auto tour mode for the selected location.

This function can only be enabled after the preset location is selected.

You can define up to 5 groups of tour settings.

1. Click **Set** to enter the tour setting window.

2. Enter a name for the tour setting. Up to 5 groups of tour settings can be defined.

3. Time (second) to stop at each tour location.

4. Select a preset location.

5. Click **Update** and then **Exit**.

Auto horizontal tour mode.

6. Click **On** to activate the auto tour mode.

**9. AutoPan:** You can use this function to enable or disable the automatic horizontal tour mode.

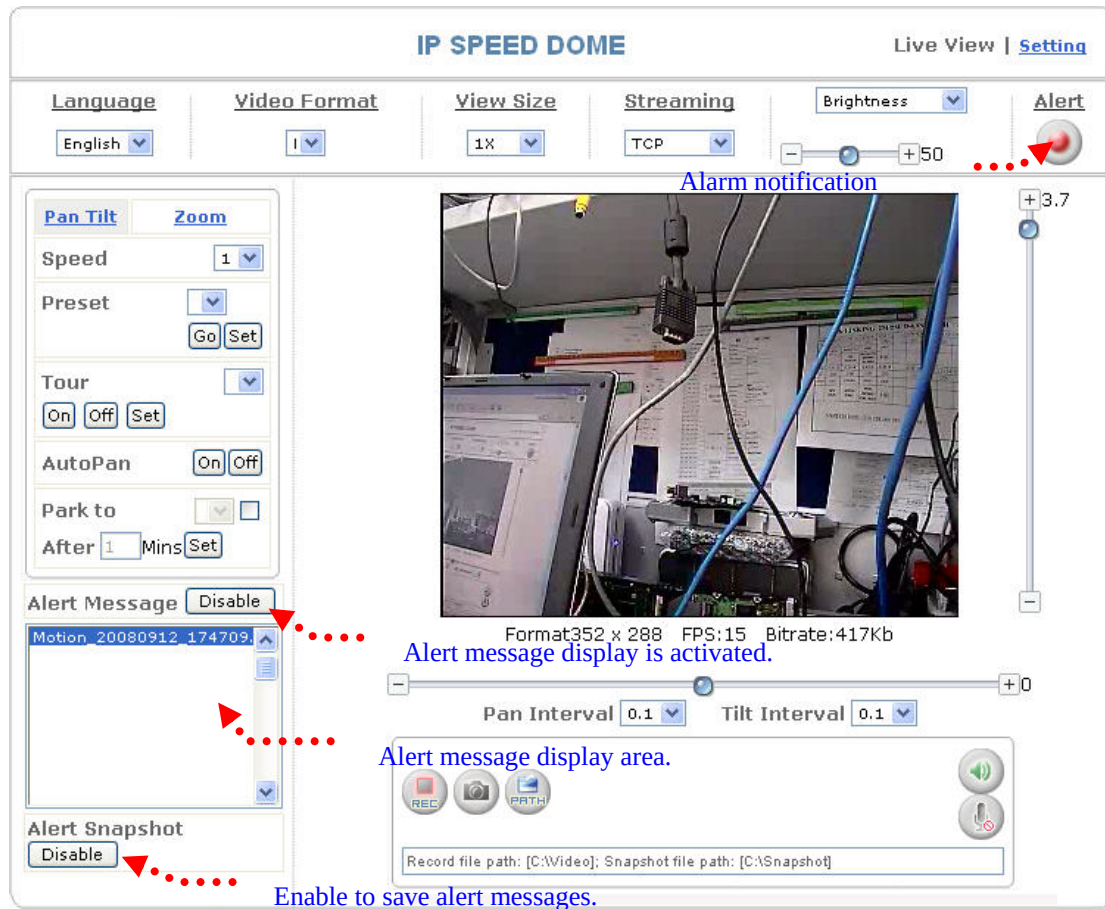
In the AutoPan mode, the camera automatically rotates counterclockwise and keeps horizontally rotating till disabled.

**10. Park to:** You can use this function to select a preset location to which the camera will return when the PTZ function is not operated any more.

**11. After minutes:** You can use this function to define the time interval at which the camera will return to the preset location when the PTZ function is not operated any more.

## 12. Alert: Notification of alarm

If the camera detects a movement or an alarm, the Alert button will flash to alert the monitoring personnel. Click the Alert button to stop the flashing.



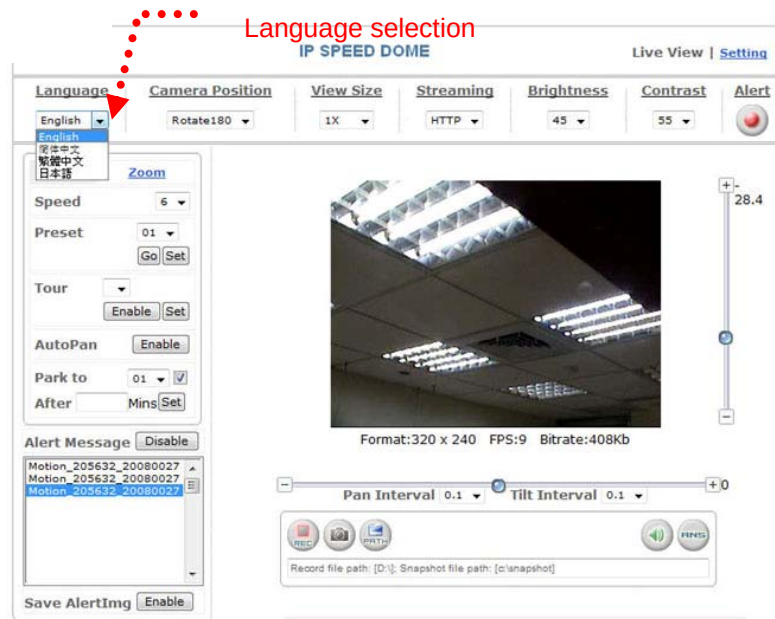
## 13. Alert Message:

Alert Message: The **Enable/Disable** button can activate or stop the display of the alert message. When **Disable** is selected, no message will show.

Save AlertImg: The **Enable/Disable** button can activate or stop the save of the alert image in the Snapshot directory. When the button shows **Enable**, you have to click it to activate the save function. When the Save AlertImg shows **Enable**, double clicking an alert message in the message list will display the image of that alert message. When an alarm is triggered, an alert message will display (up to 50 messages). The displayed message will be cleared when you quit the window. (For details of alarm settings, refer to Setting/Application Setting/ Event/Event.)

#### 14. Language (interface language selection)

This product currently supports 4 languages: English, Simplified Chinese, Traditional Chinese and Japanese.



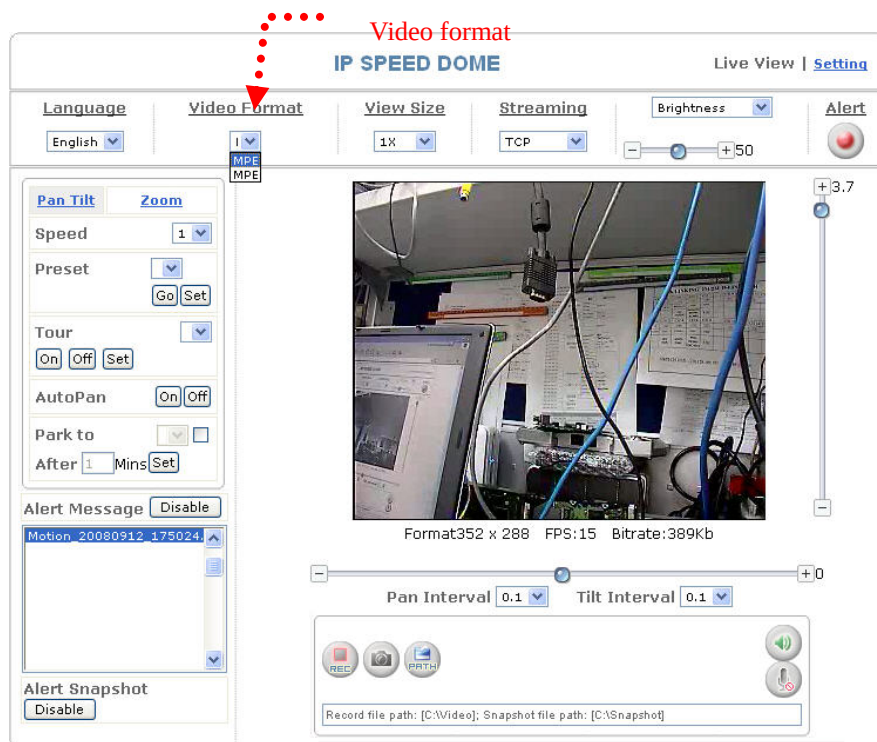
#### 15. Video Format: sets the format for streaming

MPEG4 (main stream): Stream mode at MJPEG+MPEG4 or Dual MPEG4

MPEG4 (sub stream): Stream mode at Dual MPEG4

Motion JPEG: Stream mode at MJPEG+MPEG4

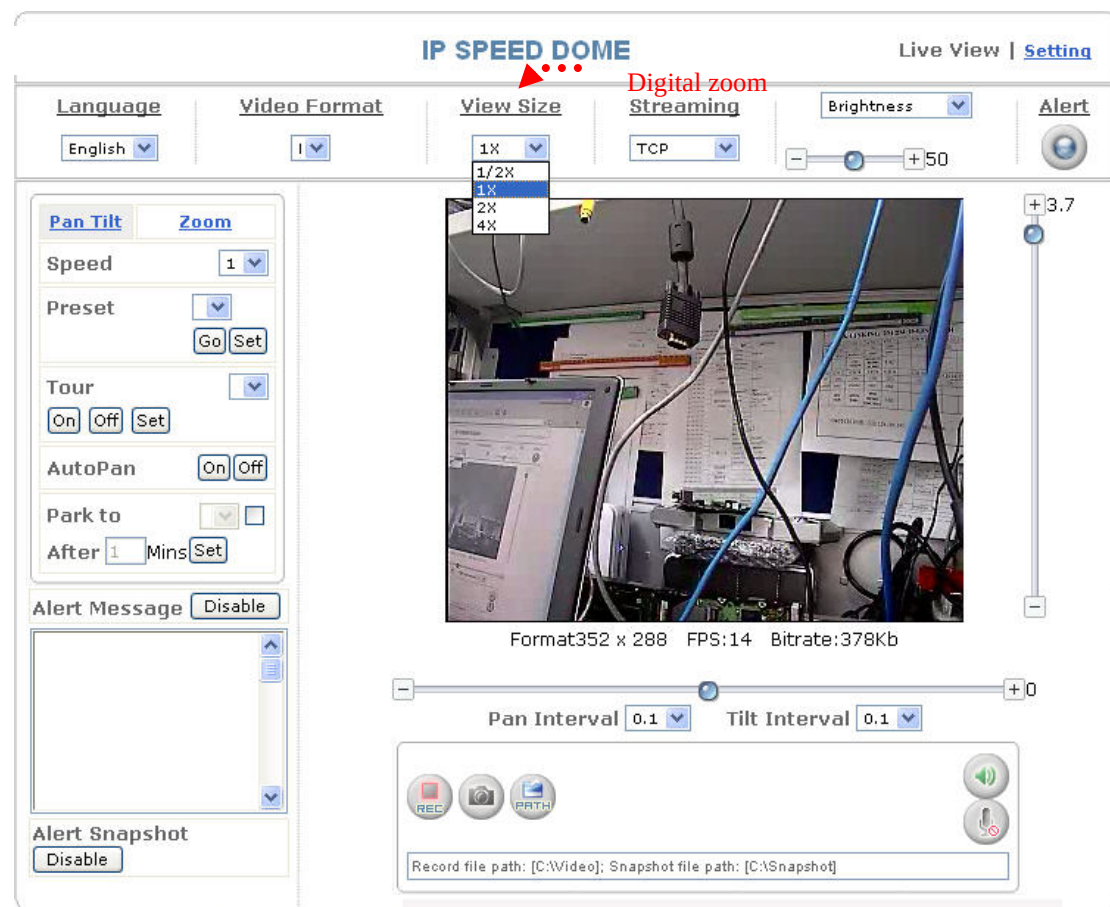
See Setting > Video / Image > Video for details.



#### 16. Zoom In/Out: Camera screen display size

Viewing option is from 0.5 to 4 times the screen size.

**Note: When you use zoom in, the screen seems rough because the resolution after digital zoom exceeds the original resolution.**



## 17. Streaming: sets the video stream protocol (HTTP is recommended)

This product provides three different video streaming protocols: UDP, TCP, and HTTP. HTTP is recommended because it allows the video stream to go through the firewall. (Refer to Setting/Basic Setting/Network/Streaming for more information).

**UDP:** provides the fastest but most unreliable transmission service. Video streams are transmitted through UDP Port (50000~60000 by default) to ensure the fastest image transmission. However, video fragment or mosaics may occur due to poor transmission quality.

**TCP:** provides reliable data transmission. Video streams are transmitted through RTSP Port (554 by default) to avoid video fragment or mosaics due to poor transmission quality.

**HTTP:** Video streams are transmitted through HTTP Port (80 by default) to ensure passing through firewalls.

## Comparison between stream protocols

|      | Tunneling | Pocket Loss | Speed   |
|------|-----------|-------------|---------|
| HTTP | Easy      | Fair        | Fair    |
| TCP  | Fair      | Lower       | Fast    |
| UDP  | Hard      | Lowest      | Fastest |

**IP SPEED DOME** Live View | [Setting](#)

---

**Language**

English ▼

**Video Format**

I ▼

**View Size**

1X ▼

**Streaming**

TCP ▼  
UDP  
TCP  
HTTP

**Brightness**

[-] [0] [50] [+]

**Alert**

[+3.7] [-]

**Pan Tilt** **Zoom**

Speed 1 ▼

Preset ▼  
Go Set

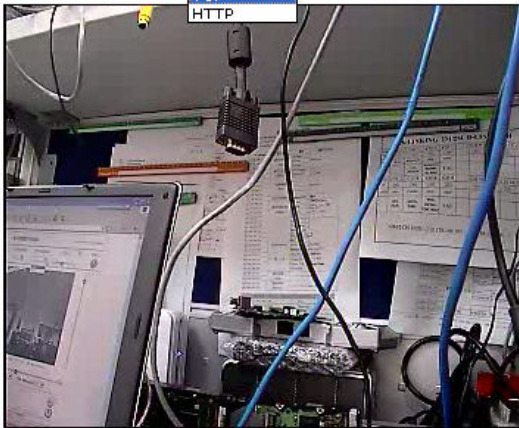
Tour ▼  
On Off Set

AutoPan On Off

Park to ▼  
After 1 Mins Set

Alert Message Disable

Alert Snapshot Disable



Format: 352 x 288 FPS: 14 Bitrate: 384Kb

Pan Interval 0.1 ▼ Tilt Interval 0.1 ▼

REC PATH

Record file path: [C:\Video]; Snapshot file path: [C:\Snapshot]

## 18. Brightness/Contrast/Saturation

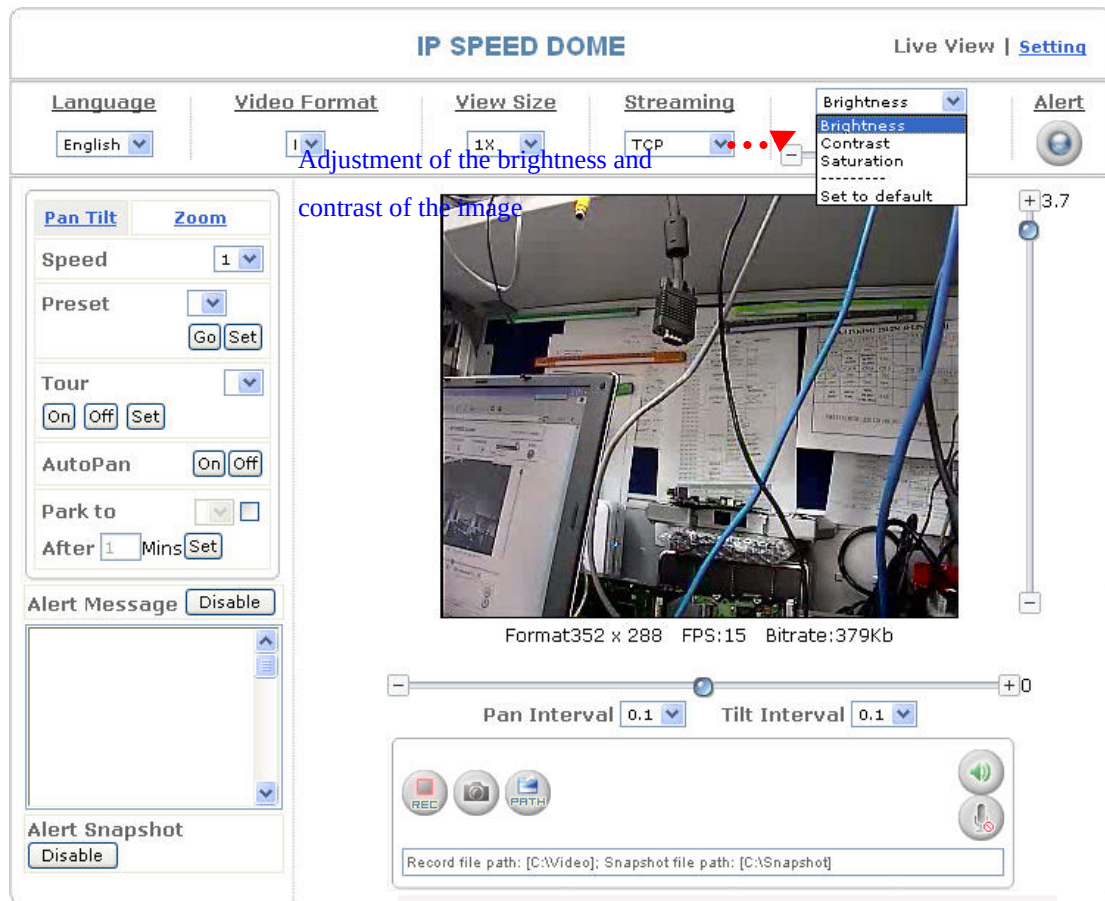
Select the item you wish to adjust, then press the + or – button to adjust video display. Press + means to increase the value and – to decrease the value of the selected item.

Brightness: Adjusts the brightness of videos

Contrast: Adjusts the contrast of colors

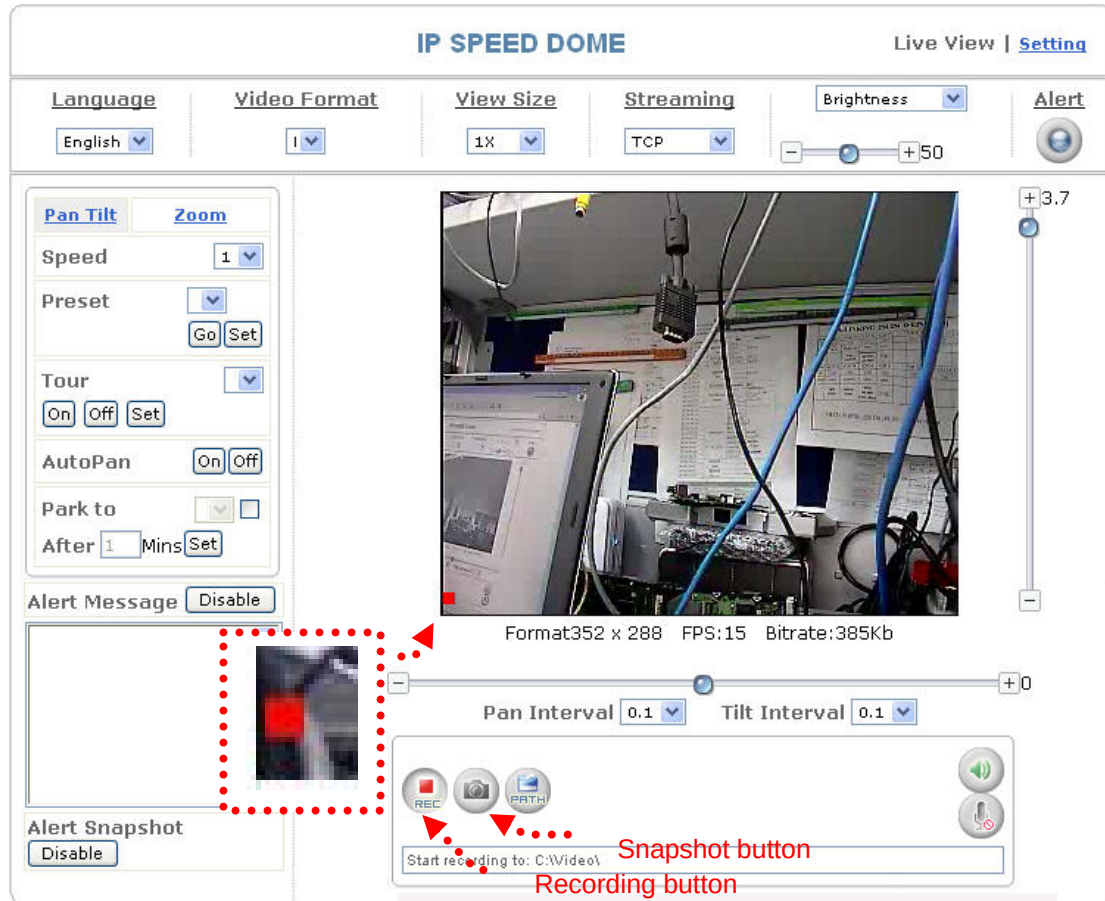
Saturation: Adjusts the saturation of colors

Set to default: Resets all items to default settings



### 19. REC: executes the video recording function

Click this button to start video recording and save the image file in the preset directory (C:\video). A red mark appears at the bottom left corner of the image when the recording function is running.



### 20. Snapshot:

When you click this button, a picture of the current image will be saved in the default folder (C:\snapshot).

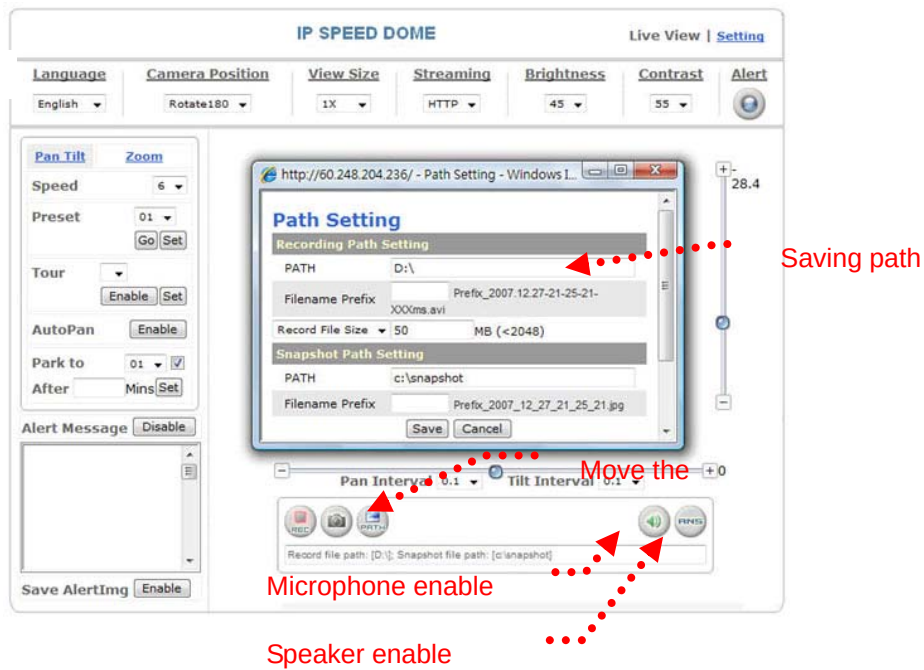
**Note: If you are using the Windows Vista operation system, files may not be saved in the default folder when you click the REC or Snapshot button. This is because the Vista system blocks the activity of untrusted websites. Please follow the instructions below to add this webpage to the trusted website.**

The image shows a sequence of steps to configure Internet Explorer's Trusted Sites. It starts with the 'Tools' menu, then the 'Internet Options' dialog box, specifically the 'Security' tab. The 'Trusted sites' zone is selected, and the 'Sites' button is clicked to open the 'Trusted sites' sub-dialog. In this sub-dialog, the 'Add this website to the zone:' field is populated with 'http://192.168.1.218/'. The 'Websites:' list below shows 'http://192.168.1.246'. The 'Require server verification (https:) for all sites in this zone' checkbox is unchecked. The 'Add' button is clicked, and finally, the 'Close' button is clicked. The bottom of the image shows a recording toolbar with a 'Trusted sites' status indicator.

1. Click on **Tools** in the IE browser.
2. Click on **Internet Options**.
3. Switch to the **Security** tab.
4. Select **Trusted site**.
5. Click on **Sites**.
6. Enter the IP address of the speed dome.
7. Cancel the selection of this option.
8. After the input is completed, click on **Add**.
9. Click on **Close** after completion.
10. Exit the IE Browser and reopen again. If the setting is correct, Trusted Sites will display.

## 21. Path: Setting of the path and filename for the recording and snapshot files

The default filename is the creation date of the file. A Prefix setting can be used for identification.



## 22. Enable/Disable microphone:

When you click the microphone icon, a "Forbidden" mark will show on the icon and the sound from an external microphone will not be received.

## 23. Enable/Disable speaker:

When you click the speaker icon, a "Forbidden" mark will show on the icon and the sound from an external speaker will not be played.

# System Settings

System setting contains basic and application settings. The basic setting is executed for basic system information, transmission speed, audio/video code, user authorization, date/time, and IP filter, while the application setting is executed for event triggering definition and other relevant settings, definition of the motion detection area, firmware update, reset to factory default, and reboot.

## Basic Settings

IP SPEED DOME [Live View](#) | [Setting](#)

**Basic Setting**

- System
- [Video / Image](#)
- [Audio](#)
- [User](#)
- [Network](#)
- [Date / Time](#)
- [IP Filtering](#)
- Application Setting**
  - [Event](#)
  - [Motion Detection](#)
  - [Firmware Upgrade](#)
  - [Factory Default](#)
  - [Reboot](#)

**System Setting**

**System Info**

|                     |                   |                                    |
|---------------------|-------------------|------------------------------------|
| Device Name         | SPEED DOME        | <input type="button" value="Set"/> |
| MAC Address         | 00:30:F0:0F:00:12 |                                    |
| IP Address          | 60.248.204.236    |                                    |
| Network Mask        | 255.255.255.224   |                                    |
| Gateway             | 60.248.204.225    |                                    |
| Firmware Version    | 1.23 STD-1        |                                    |
| Firmware Build Time | 20071219          |                                    |
| Firmware Model      | UNC-9412          |                                    |
| Current Viewers     | 1                 |                                    |

**System Log**

|                      |   |                  |                      |
|----------------------|---|------------------|----------------------|
| 2007 Dec 22 16:29:06 | : | [60.248.204.247] | root start live view |
| 2007 Dec 22 19:50:55 | : | [60.248.204.247] | root start live view |
| 2007 Dec 23 00:04:40 | : | [60.248.204.247] | root start live view |
| 2007 Dec 23 17:35:45 | : | [60.248.204.247] | root start live view |
| 2007 Dec 23 18:47:34 | : | [60.248.204.247] | root start live view |
| 2007 Dec 23 20:18:49 | : | [60.248.204.247] | root start live view |
| 2007 Dec 24 01:52:25 | : | [60.248.204.247] | root start live view |
| 2007 Dec 24 12:26:41 | : | [220.228.185.2]  | root start live view |
| 2007 Dec 24 12:27:29 | : | [220.228.185.2]  | root stop live view  |
| 2007 Dec 24 14:24:36 | : | [60.248.204.247] | root start live view |
| 2007 Dec 24 18:27:05 | : | [60.248.204.247] | root start live view |
| 2007 Dec 25 08:08:05 | : | [60.248.204.247] | root start live view |
| 2007 Dec 25 09:03:17 | : | [60.248.204.247] | root start live view |
| 2007 Dec 25 12:02:25 | : | [60.248.204.247] | root start live view |
| 2007 Dec 25 17:42:08 | : | [60.248.204.247] | root start live view |

### [Basic Setting > System \(System info\)](#)

#### ■ Basic Setting > System > System Info

Device Name: You can set the name for your camera here. Click  to complete the setting.

MAC Address, IP Address, Network Mask, and Gateway: Network information.

Firmware: Firmware version information.

Current Viewers: The number of viewers who are currently accessing the video stream.

#### ■ Basic Setting > System > System Log

The administrator can view all login information of this camera, including boot record, video streaming mode, login IP, changes, and the date/time information. You can copy the entries to a Word document and save them manually. Please note that all information is deleted when you turn off the machine.

## [Basic Setting > Video/Image](#)

### Basic Setting > Video Image > Video Image

#### ■ Basic Setting > Video / Image > Video Image > Video Format

You can select MPEG4 or MJPEG as the video format. It is recommended to select MPEG4 for real-time browsing to optimize the bandwidth. MJPEG is a good choice for the best resolution when video recording is required for collection of evidence.

IP SPEED DOME

[Live View](#) | [Setting](#)

Basic Setting

[System](#)  
[Video / Image](#)  
Video  
[PreProc](#)  
[Sensor](#)  
[Audio](#)  
[User](#)  
[Network](#)  
[Date / Time](#)  
[IP Filtering](#)

Application Setting

[Event](#)  
[Motion Detection](#)  
[Privacy Mask](#)  
[Firmware](#)  
[Upgrade](#)  
[Factory Default](#)  
[Reboot](#)

Video / Image Setting

Video Setting

Stream Mode ☒ MJPEG+MPEG4 ☐ Dual MPEG4

MPEG4

Resolution

FrameRate(FPS)  frames

Quality ☒ Bitrate  Kbps ☐ Fix Quality

MJPEG

Resolution

FrameRate(FPS)  frames

Quality ☐ Fix Quality

IP SPEED DOME

[Live View](#) | [Setting](#)

Basic Setting

[System](#)  
[Video / Image](#)  
Video  
[PreProc](#)  
[Sensor](#)  
[Audio](#)  
[User](#)  
[Network](#)  
[Date / Time](#)  
[IP Filtering](#)

Application Setting

[Event](#)  
[Motion Detection](#)  
[Privacy Mask](#)  
[Firmware](#)  
[Upgrade](#)  
[Factory Default](#)  
[Reboot](#)

Video / Image Setting

Video Setting

Stream Mode ☐ MJPEG+MPEG4 ☒ Dual MPEG4

MPEG4 (Main Stream)

Resolution

FrameRate(FPS)  frames

Quality ☒ Bitrate  Kbps ☐ Fix Quality

MPEG4 (Sub Stream)

Resolution

FrameRate(FPS)  frames

Quality ☐ Bitrate  Kbps ☒ Fix Quality

## ■ Basic Setting > Video / Image > Video Image > Video Resolution

Generally speaking, selection of resolution is dependent on the bandwidth of the network you are using. This product offers different selections for video/audio settings. However, to ensure undisrupted image transmission, you need a higher uploading bandwidth. Generally, it is recommended to use CIF resolution for normal bandwidth. To meet other requirements, refer to Attachment B for more information.

The product offers 4 image resolutions (PAL/NTSC):

1. D1 (704x576 / 704x480)
2. CIF (352x288 / 352x240)
3. QCIF (176x144 / 176x120)

The screenshot shows the 'IP SPEED DOME' web interface. On the left is a sidebar with navigation links: Basic Setting, System, Video / Image, Video, PreProc, Sensor, Audio, User, Network, Date / Time, IP Filtering, Application Setting, Event, Motion Detection, Privacy Mask, Firmware, Upgrade, Factory Default, and Reboot. The main content area is titled 'Video / Image Setting'. Under 'Video Setting', 'Stream Mode' is set to 'MJPEG+MPEG4'. The 'MPEG4' section is expanded, showing 'Resolution' set to 'CIF(352x288 / 352x240)', 'FrameRate(FPS)' set to '1', and 'Quality' set to 'Fix Quality' with a 'Best' dropdown. A red arrow points to the 'Resolution' dropdown with the text 'Frame rate selection'. The 'MJPEG' section is also visible, showing 'Resolution' set to 'CIF(352x288 / 352x240)', 'FrameRate(FPS)' set to '1', and 'Quality' set to 'Fix Quality' with a 'Best' dropdown. 'Save' and 'Reset' buttons are at the bottom.

## ■ Basic Setting > Video / Image > Video Image > Frame per Second (FPS):

With NTSC, you can choose 1, 2, 3, 4, 5, 6, 7, 10, 15 or 30 for video resolution

With PAL, you can choose 1, 2, 3, 4, 5, 6, 12 or 25 for video resolution.

**IP SPEED DOME** [Live View](#) | [Setting](#)

**Basic Setting**

[System](#)

**Video / Image**

[Advance](#)

[Privacy Zone](#)

**Audio**

**User**

**Network**

[Date / Time](#)

[IP Filtering](#)

**Application Setting**

[Event](#)

[Motion Detection](#)

[Firmware Upgrade](#)

[Factory Default](#)

[Reboot](#)

**Video / Image Setting**

Video / Image ☐ Enable ☒ Disable

3GPP ☐ Enable ☒ Disable

Video Format MPEG4

Video Resolution CIF(352x288 / 320x240) FPS selection

Frame per Second (FPS) 10

Video Quality 30 15 10 7 6 4

Quality Best

Bitrate 384K

frames

Reset

**OSD**

Display Mode ☐ Date ☐ Time ☐ Text

Display Text IPCam

Display Color 255 (0~255)

Save Reset

**Sensor**

Brightness 45 (0~100)

Contrast 55 (0~100)

Save Reset

- **Basic Setting > Video / Image > Video Image > Video Quality**  
 You can select Fix Quality (resolution priority) or Fix Bitrate (fluency priority) at the same bandwidth.  
 Five options are available for your choice: Best, Better, Normal, Fast, and fastest.

**IP SPEED DOME** [Live View](#) | [Setting](#)

**Basic Setting**

[System](#)

[Video / Image](#)

[Video](#)

[PreProc](#)

[Sensor](#)

**Audio**

**User**

**Network**

[Date / Time](#)

[IP Filtering](#)

**Application Setting**

[Event](#)

[Motion Detection](#)

[Privacy Mask](#)

[Firmware Upgrade](#)

[Factory Default](#)

[Reboot](#)

**Video / Image Setting**

Video Setting

Stream Mode ☒ MJPEG+MPEG4 ☐ Dual MPEG4

**MJPEG4**

Resolution D1(704x576 / 704x480) Fix bitrate

FrameRate(FPS) 10 frames

Quality ☐ Bitrate 400 Kbps

☒ Fix Quality Best

**MJPEG**

Resolution CIF(352x288 / 320x240)

FrameRate(FPS) 1 frames

Quality Fix Quality Best

Video quality selection

Save Reset

15 transmission speeds ranging from 50K to 3M are available in the Fix Bitrate mode. The higher the transmission speed, the better the quality and fluency

**IP SPEED DOME** [Live View](#) | [Setting](#)

**Basic Setting**

- [System](#)
- [Video / Image](#)
- [Video](#)
- [PreProc](#)
- [Sensor](#)
- [Audio](#)
- [User](#)
- [Network](#)
- [Date / Time](#)
- [IP Filtering](#)

**Application Setting**

- [Event](#)
- [Motion Detection](#)
- [Privacy Mask](#)
- [Firmware](#)
- [Upgrade](#)
- [Factory Default](#)
- [Reboot](#)

**Video / Image Setting**

**Video Setting**

Stream Mode ☒ MJPEG+MPEG4 ☐ Dual MPEG4

**MJPEG4**

Resolution

FrameRate(FPS)  frames

Quality ☒ Bitrate ☐ Fix Qua

**MJPEG**

Resolution

FrameRate(FPS)  frames

Quality

[Save](#) [Reset](#)

## Basic Setting > Video / Image > PreProc

### ■ Basic Setting > Video / Image > PreProc > PreProc Setting

Camera position: Sets the position of camera on the screen—up, down, left and right

Desktop: Select this option when the product is in normal deployment.

Flip: Select this option when the product is mounted on the ceiling.

Mirror: Select this option when the product is in normal deployment, but from the reflection of a mirror.

Rotate 180°: Select this option when the product is installed on the ceiling and from the reflection of a mirror.

**IP SPEED DOME** [Live View](#) | [Setting](#)

**Basic Setting**

- [System](#)
- [Video / Image](#)
- [Video](#)
- [PreProc](#)
- [Sensor](#)
- [Audio](#)
- [User](#)
- [Network](#)
- [Date / Time](#)
- [IP Filtering](#)

**Application Setting**

- [Event](#)
- [Motion Detection](#)
- [Privacy Mask](#)
- [Firmware](#)
- [Upgrade](#)
- [Factory Default](#)
- [Reboot](#)

**PreProc Setting**

**PreProc**

Camera Position

**Overlay Setting**

Overlay

Display Mode  ☐ Time ☐ Text

Foreground Color

Display Text

Date/Time Position

Text Position

Alpha Blending

[Save](#) [Reset](#)

## ■ Basic Setting > Video / Image > PreProc > Overlay Setting

Display mode: You can select to display the date, time and text or not.

Foreground color: Selects the color for date, time and text display. Click on the color block to bring out the color palette. Move the pointer to the desired color and click on it.

Display text: Inputs the text you wish to display on the screen, e.g. Lobby IP Cam.

Date/time position: Selects the location where the date and time are displayed on the screen—any of the four corners.

Text position: Selects the location where text is displayed on the screen—any of the four corners.

Alpha Blending: Transparency available options are 0%, 50% and 100%.

Please don't forget to press the Save button to save and apply the settings.

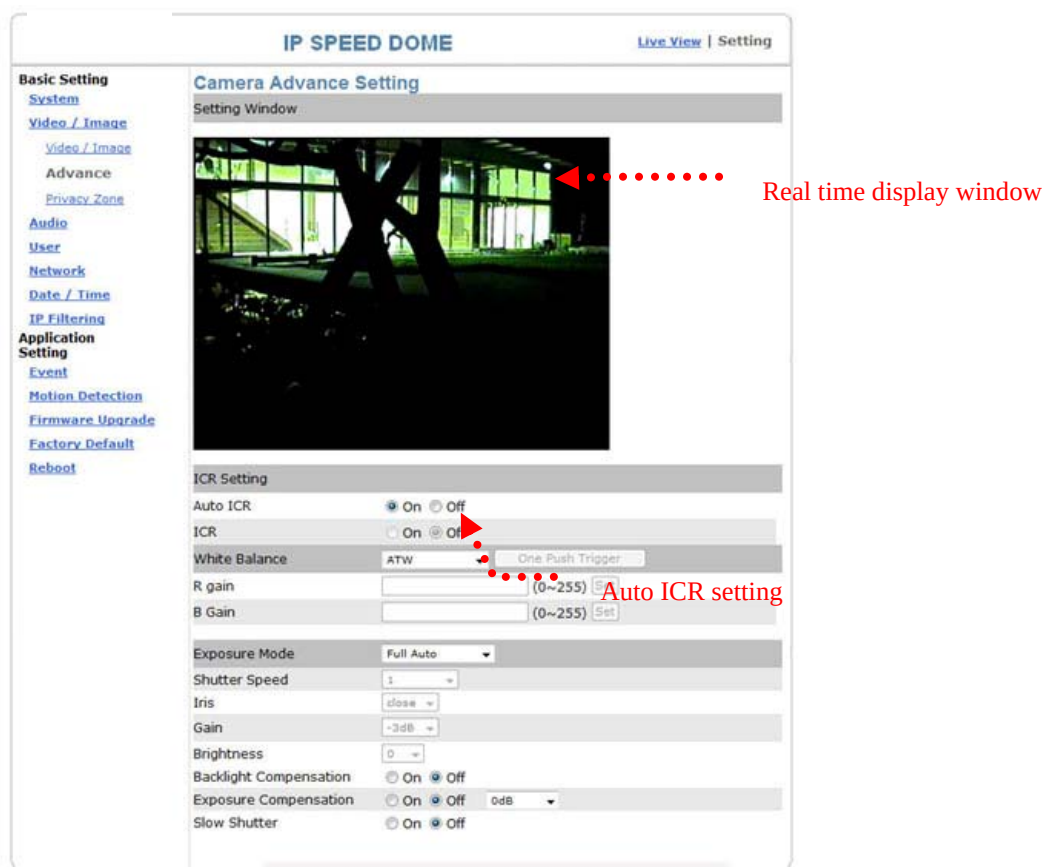


Source : Format:352 x 288 | FPS:25 | BitRate:520Kb

## Basic Setting > Video / Image > Sensor

Adjust brightness, contrast and color. Displays date, camera ID and relevant information on the video.

When the setting on this page is changed, a new image will immediately appear on the real-time display window.

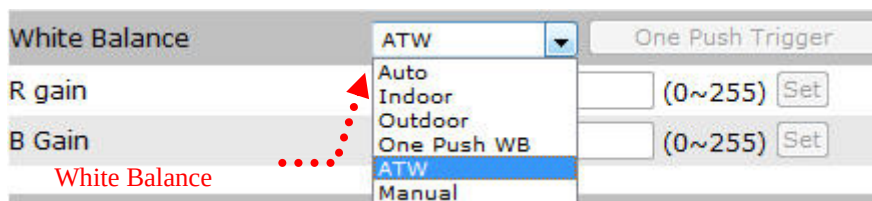


### Basic Setting > Video / Image > Sensor > ICR Setting

When the ambient illumination becomes dim, the ICR changes the color filter to the monochrome mode via a micro motor in front of the lens. The Auto ICR is On by default. Select Off if manual setting is required.

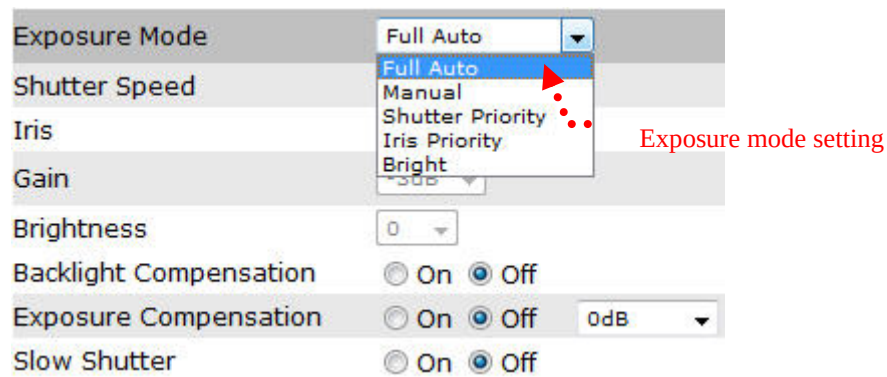
### Basic Setting > Video / Image > Sensor > White balance

The white balance setting can adjust the difference of white color in natural or artificial light. Select Auto if you are not familiar with this setting.



### Basic Setting > Video / Image > Camera Advance Setting > Exposure Mode

The exposure mode defines how the computer processes the natural light source. 5 modes are available: full auto, manual, shutter priority, iris priority, and bright. The clearness of the image depends on the exposure (i.e. the light required for CCD to acquire clear image), which is determined by the shutter speed and diaphragm aperture. If you are not familiar with the setting, select Full Auto.



## [Basic Setting > Audio \(Sound\)](#)

### Basic Setting > Audio > Audio (sound setting)

#### ■ Basic Setting > Audio > Audio > Mode

**Audio mode:** Full duplex, half duplex, simplex microphone only, simplex amplifier only, and audio off.

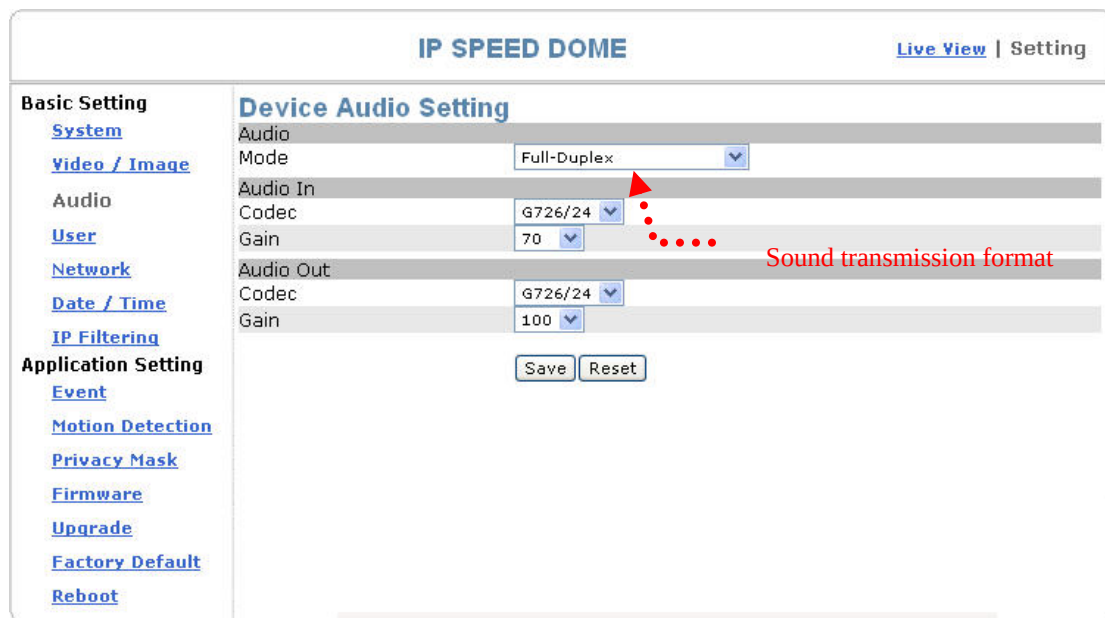
Full duplex: Allows using a microphone and amplifier at the same time, or turning them off.

Half duplex: Allows using a microphone or amplifier by manual switch.

Simplex microphone only: Allows using the microphone only.

Simplex amplifier only: Allows using the speaker only.

Audio off: Turns audio off; i.e. both the microphone and speaker are off.



Audio input: 4 formats

Audio output: 4 formats

G726/24: Uses G.726 24Kbps for audio encryption/decryption.

Gain: Adjust the volume of the audio.

## Basic Setting > User(User)

The administration of the camera can set up access privileges by administrator, operator, and viewer to ensure the security and control of the camera. The access privileges and setting steps are described as below.

### **Basic Setting > User > User List (access privilege list)**

The access privileges of the administrator, operator, and viewer are listed as follows. The administrator has the right to define the privilege for each user depending on requirements.

| User                |                  | Administrator | Operator | Viewer                  |
|---------------------|------------------|---------------|----------|-------------------------|
| Live View           |                  | v             | v        | v                       |
| System Setting      |                  | v             | v        |                         |
| Video Setting       |                  | v             | v        |                         |
|                     | 3GPP             | v             | v        |                         |
| Audio Setting       |                  | v             | v        |                         |
| Date / Time Setting |                  | v             |          |                         |
| User Setting        |                  | root          |          |                         |
| Network Setting     |                  | v             |          |                         |
|                     | Wireless         | v             |          |                         |
|                     | DDNS setting     | v             |          |                         |
|                     | PPPoE setting    | v             |          |                         |
|                     | Streaming        | v             |          |                         |
|                     | UPnP             | v             |          |                         |
|                     | SMTP             | v             |          |                         |
|                     | SAMBA            | v             |          |                         |
|                     | Notification     | v             |          |                         |
| IP Filter setting   |                  | v             |          |                         |
| Event Setting       |                  | v             | v        |                         |
|                     | schedule setting | v             | v        |                         |
|                     | event server     | v             | v        |                         |
|                     | trigger setting  | v             | v        |                         |
| Motion Setting      |                  | v             | v        |                         |
| Firmware Upgrade    |                  | root          |          |                         |
| Factory default     |                  | v             |          |                         |
| Reboot Setting      |                  | v             |          |                         |
| PTZ Control         |                  | v             |          | User with PTZ privilege |

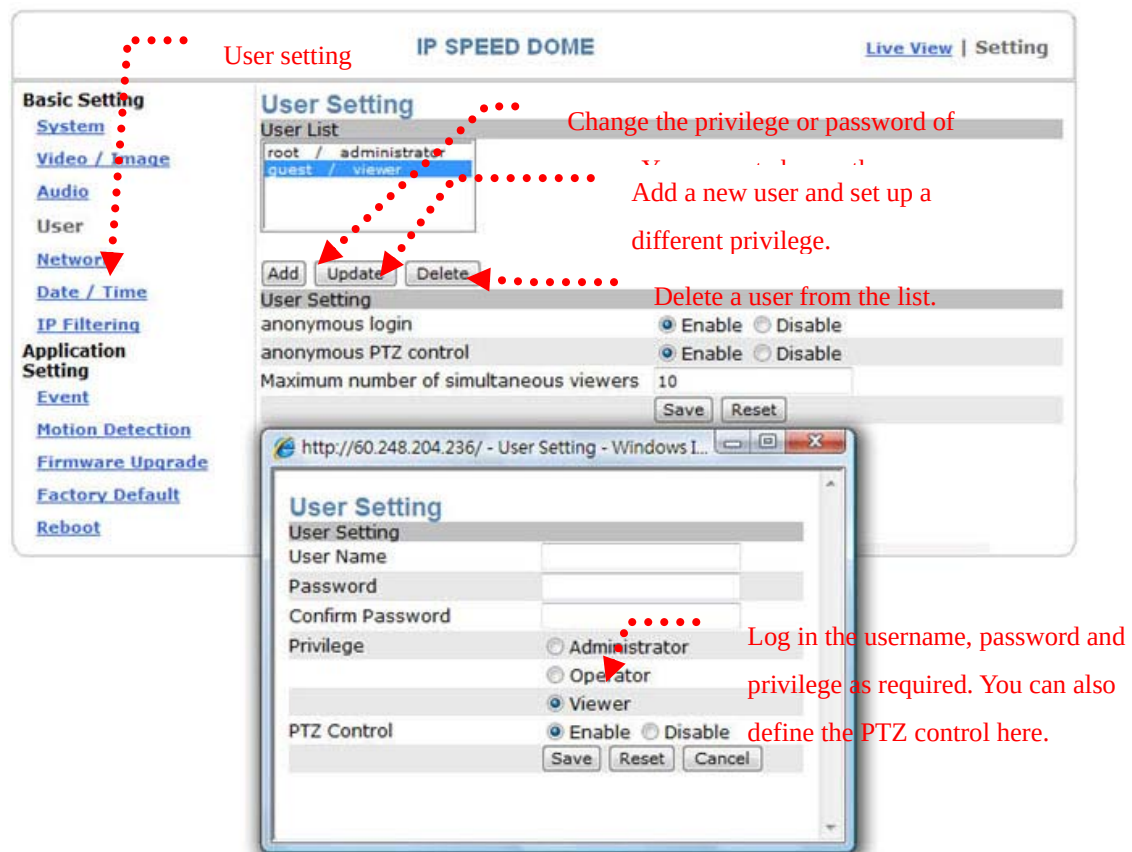
Steps: Click Add (to add a new user), Update (to change the privilege or password of a user on the list), or Delete (to delete a user from the list) and complete required fields. Then Click "Save" to complete the setting.

Options:

Add: Add a new user and set up a different privilege.

Update: Change the privilege or password of a user. You cannot change the name of the user.

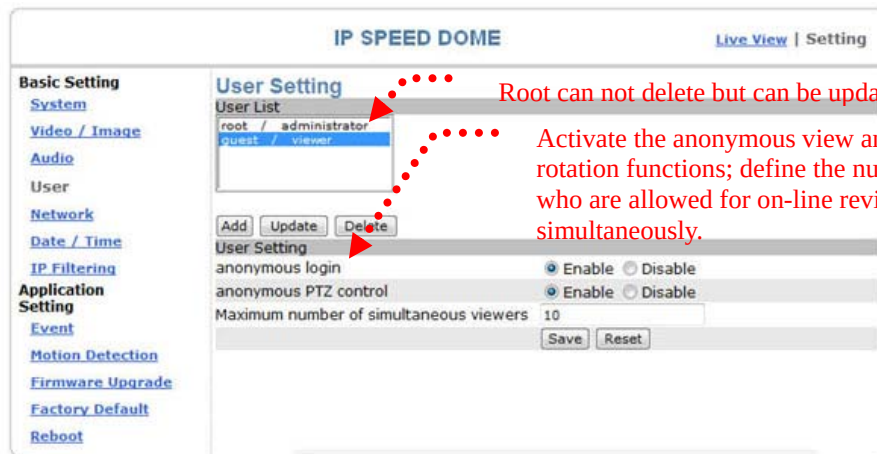
Delete: Delete a user from the list.



### Basic Setting > User > User Setting (privilege setting)

For special business situations, this product allows you to log in to browse without the need of keying in your username and password. For this purpose, you need to check “Enable” at Anonymous Login. To allow the user to control the camera, you need to check “Enable” at Anonymous PTZ Control. However, “Disable” for both options is recommended for the sake of security. Depending on the bandwidth and requirements, a limit up to 10 viewers who are allowed to view the camera simultaneously can be defined.

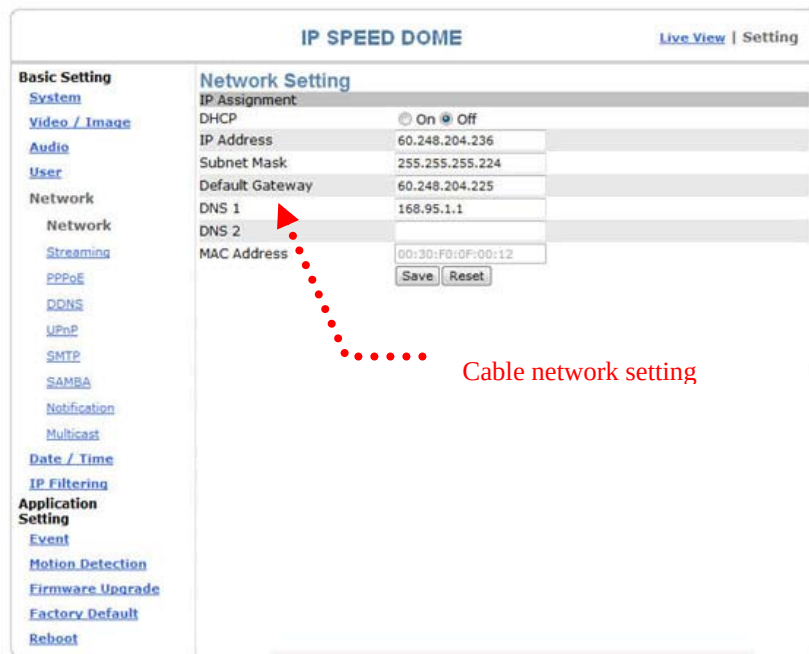
**Note:** The initial login name and password of this product is “root”. This “root” user name cannot be deleted but the password can be changed. For security purposes, we recommend that you change and remember the password after the first login. If you forget the new password, the only way is to use the hardware Reset key to restore the Factory Default.



Basic Setting > Network (Network Settings)

Basic Setting > Network > Network (cable network setting page)

■ Basic Setting > Network > Network > IP Assignment



### DHCP setting:

DHCP (Dynamic Host Configuration Protocol) is a protocol that enables automatic assignment of TCP/IP information to the client. Each DHCP client connects to the DHCP server to access its network setting information, including IP address, gateway, and DNS server.

The IP address of the camera is 192.168.0.20 by default when DHCP is "OFF". When you select "DHCP ON" and access the DHCP network environment, the camera will automatically send a DHCP packet to request an IP address. This IP address is assigned automatically from the DHCP server on the network. No additional settings are required for this page unless you need to change the network configuration. The DHCP status of the camera is "OFF" by default.

### Other settings:

For IP address, Subnet mask, Default gateway, DNS 1, and DNS 2, the DHCP server will assign these values automatically when DHCP is in "ON" status; otherwise, you need to key in the values manually.

**Note: Where no IP address is assigned from the DHCP server, the system will set the Link-Local Address automatically.**

## Basic Setting > Network > Streaming (streaming Setting)

Setting of the video streaming port (**HTTP and factory default are recommended**)

1. HTTP: Port 80 can pass through most firewalls. Video streams are transmitted through HTTP Port (80 by default) to ensure passage through firewalls.
2. RTSP: Port 554 uses a fixed port (i.e. TCP) or can be defined by users to ensure reliable data transmission. Video streams are transmitted through RTSP Port (554 by default) to avoid video fragment or mosaics due to poor transmission quality.
3. RTP: Port 50000 to 60000 are UDP ports and can be defined by users. They provide the fastest but also most unreliable transmission service. Video streams are transmitted through UDP Port (50000~60000 by default) to ensure the fastest image transmission. However, video fragment or mosaics may occur due to poor transmission quality.



## Basic Setting > Network > PPPoE (dial-up networking setting)

PPPoE: Point-to-Point Protocol over Ethernet is a protocol that supports access to a high-speed wideband network using a PC and a wideband modem (such as xDSL, Cable, Wireless modem). The user need only to equip the PC with an Ethernet card and apply to an ISP (such as HiNet) and an ADSL provider (such as Chunghwa Telecom) for ADSL service to roam the Internet through ordinary twisted copper wires.

PPPoE: Point to Point Protocol over Ethernet is applicable to networking via a xDSL or cable modem. PPPoE setting must be executed in the LAN environment for your PC to connect to ADSL. Follow the steps below to complete the setting:

1. Dial: You can select whether or not to dial when you boot the machine.
2. Use DHCP or fixed IP for connection to the LAN environment.
3. Key in the IP address of the camera and enter "PPPoE Setting" following the route Setting → Basic Setting → Network → PPPoE.
4. Key in the xDSL "Username" and "Password" acquired from your ISP. Click **Save** to confirm the setting.
5. Where the ADSL modem and the camera is connected via a switch-hub, you can press "Reboot" or restart the machine manually to try PPPoE dialing when the setting of the camera has been completed.
6. A different IP address is obtained after each dial-up network connection. You can get the new IP address from Setting → Basic Settings → System. If you want to know the new IP address anytime, you must enter Setting → Basic Settings → Notification to set some settings. There are three ways to get information: 1. SMTP 2. FTP 3. HTTP. For details, refer to the Notification Setup Menu.

**Note: You can use the DDNS function to access the camera. Refer to the "DDNS Setting" page for more information.**

The screenshot shows the 'IP SPEED DOME' web interface. On the left is a sidebar with a tree view of settings: Basic Setting, System, Video / Image, Audio, User, Network (expanded), Streaming, PPPoE, DDNS, UPnP, SMTP, SAMBA, Notification, Multicast, Date / Time, IP Filtering, Application Setting, Event, Motion Detection, Firmware Upgrade, Factory Default, and Reboot. The 'Network' section is expanded, showing 'PPPoE' as the selected option. The main content area is titled 'PPPoE Setting'. It includes a 'Dial' section with a radio button for 'On boot' (selected) and 'Off'. Below this are input fields for 'Username' and 'Password', followed by 'Save', 'Reset', and 'Dial' buttons. A section titled 'PPPoE information' contains input fields for 'IP Address', 'Subnet Mask', 'Default Gateway', and 'DNS'. A red dotted arrow originates from the text 'PPPoE setting' and points to the 'Dial' radio button.

■ **Basic Setting > Network > PPPoE > PPPoE**

Dial: You can select whether or not to dial when you boot the machine (On Boot or Off).

Username: Enter the username provided by your ISP.

Password: Enter the password.

■ **Basic Setting > Network > PPPoE > PPPoE Information**

IP Address: The IP address acquired when dialing has been executed successfully.

Subnet Mask: The subnet mask information acquired when dialing has been executed successfully.

Default Gateway: The gateway information acquired when dialing has been executed successfully.

DNS: The ISP domain name acquired when dialing has been executed successfully.

### Basic Setting > Network > DDNS (Dynamic Domain Name Server Setting)

The IP address (Ex. 210.168.0.22) is like a telephone number, while the website address is like a name in an address book. The DDNS allows the user to access the website by entering the name of the website without memorizing a bunch of cold numbers.

When you apply for an Internet service, you will have at least one IP address from your ISP that is either fixed or dynamic. Most of the ADSL service providers will give you a dynamic IP for ADSL environments, which means your IP address will constantly change each time you connect to the Internet. As a result, users from WAN environments will have much difficulty finding the correct IP address. The DDNS (Dynamic DNS service) is created for exactly this kind of moment. By updating your WAN IP address each time you connect to the Internet, the DDNS helps you locate your website and access your website easily. You can find a lot of free DDNS service providers on the Internet, such as [www.no-ip.com](http://www.no-ip.com) and [www.DynDNS.org](http://www.DynDNS.org).

Some gateway-routers can directly communicate with DDNS. In this case, you may directly enter your DDNS account on the setting page in the Internet router, and then the router will update your WAN IP status whenever it is changed and report to the DDNS. If your router does not support direct communication with the DDNS, you can download a small application program on the DDNS service page to help you update your WAN IP.

#### **Item Description:**

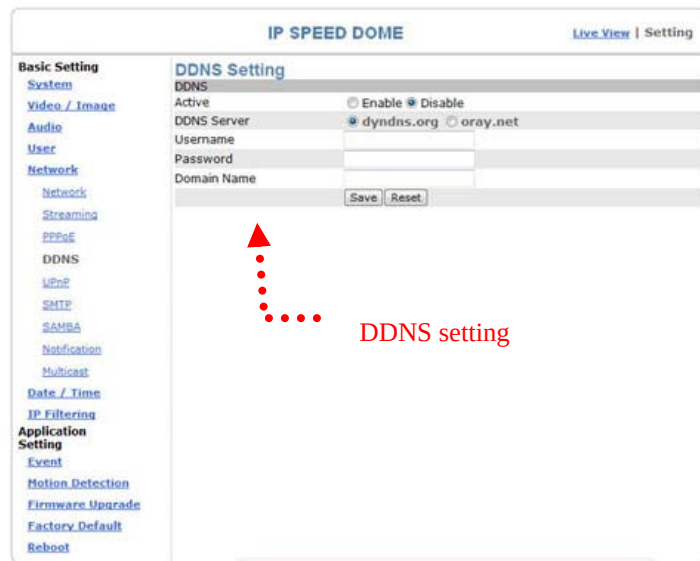
Active: enables/disables DDNS

DDNS Server: currently we only support <http://dyndns.org>. This is a free domain name server provided by DynDNS. You may log on this website for relevant information and apply for free domain names.

Username: your account for the domain name you applied for

Password: your password for the domain name you applied for

Domain Name: the domain name you applied for.



## Basic Setting > Network > UPnP (Universal Plug and Play)

If you connect your camera to a router, IP allocator, or wireless AP, your camera will possibly be blocked by the NAT and can't be located on the Internet. To penetrate the firewall, activate the supportive item- UPnP. The Link URL shows the external IP address and the port of the router. Enter the IP address in the Internet Explorer to penetrate the NAT.

### ■ Basic Setting > Network > UPnP > UPnP Device

Active: yes (enable)/no (disable)

Device Name: the name of the UPnP device

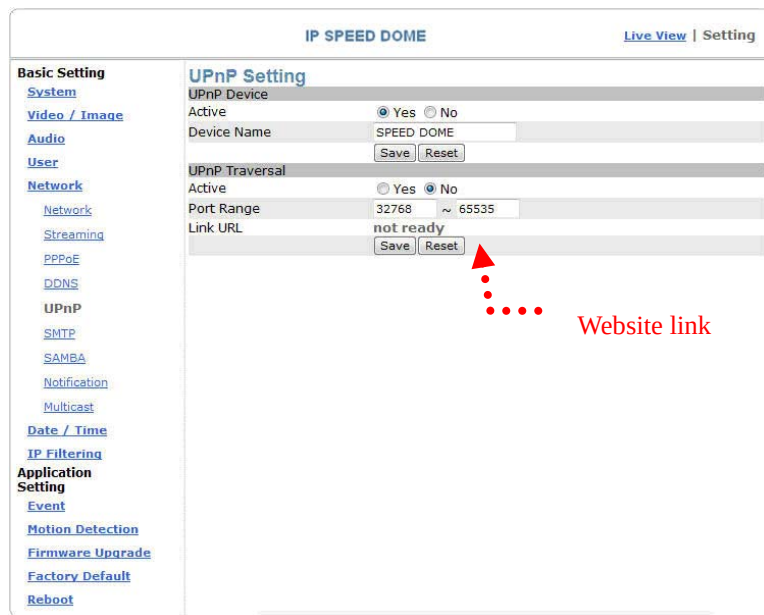
### ■ Basic Setting > Network > UPnP > UPnP Traversal

Active: yes (enable)/no (disable)

Port Range: the range of the usable ports, from 32768 to 65535 as default

Link URL location: After the network camera penetrates the firewall successfully, the actual external IP address and port will be shown.

Click "Save" to confirm when you finish.

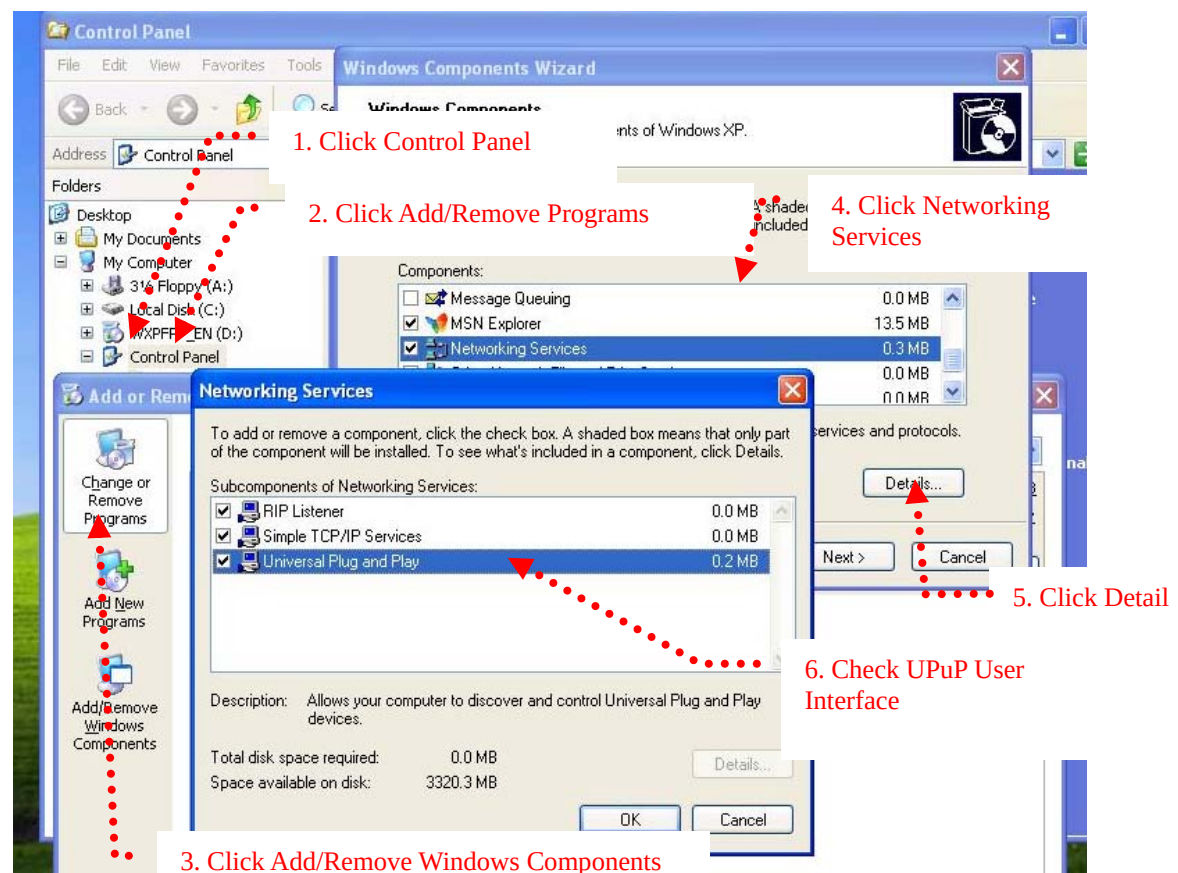


UPnP setting

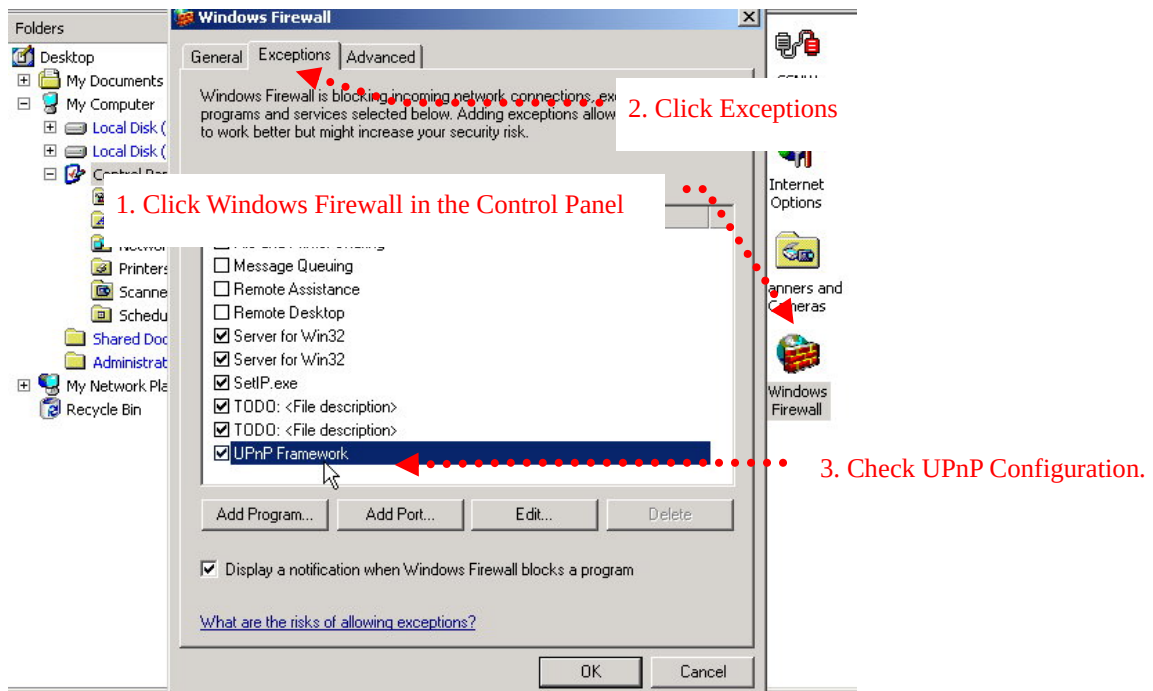
## To activate the UPnP function in Windows OS:

Ex: Windows XP:

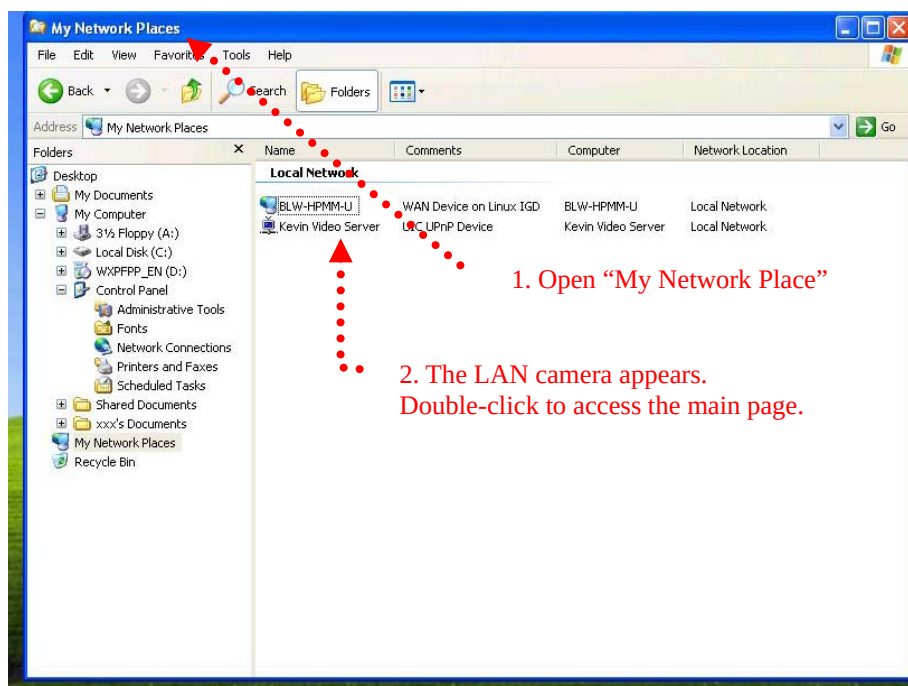
1. Windows component installation.



2. Open Windows firewall option



3. View the connection device using “My Network Place”



### Basic Setting > Network > SMTP Server (mail server setting)

This camera is able to transmit images to a particular email address when a motion detection event occurs or a sensor is triggered. To use this function, a mail server setting for the camera is required.

Enter the following information in sequential order to complete the setting:

- SMTP server: the SMTP server IP address.
- SMTP From: the email of the sender, i.e. xxx@xxx.com
- SMTP Authentication: enables/disables

- User name: the SMTP server username.
- Password: the password of the SMTP server.
- Select “SAVE” to save the setting.

## Basic Setting > Network > Samba

This camera is able to upload the snapshots to a specified shared folder when an event is triggered. To use this function, a Samba setting is required.

### Options:

Active: Enable/Disable

Samba Authentication: Enable/Disable

Username: the username

Password: the password

Path: specify the IP address of the computer you want to share with and the file name, i.e. 192.168.0.X/xxx

Shared Folder Size (MB): the total capacity of the folder. Always remember to set the size of the folder to avoid exhaustion of disk capacity.

Max Record File Size (MB): the upper limit of the record file size. The size should not exceed the total capacity of the folder.

Samba setting

## **Basic Setting > Network > Notification Of IP Address Change (IP address change notice)**

This setting is not necessary for a fixed IP. For a dynamic IP, you need to update the IP address every time you connect to the Internet to access the camera. This setting allows you to update the IP address by the automatic notification of IP address change. Choose one of the following three notice options to update the IP address:

### **1. Notification via SMTP mail server**

#### **■ Basic Setting > Network > Notification of IP Address Change > SMTP Notification**

SMTP Notification: notification via SMTP mail server

SMTP SendTo: the recipient, i.e. xxx@xxx.com

SMTP Subject: mail subject

Select **Save** to complete and activate your settings.

### **2. Notification via FTP server**

#### **■ Basic Setting > Network > Notification of IP Address Change > FTP Notification**

FTP Server: FTP Server name.

FTP Port: FTP port. The default setting is 21 (recommended).

FTP Upload path: the path to upload files.

FTP Login name: the name to log in the FTP.

FTP Login Password: the password to log in the FTP.

Select **Save** to complete and activate your settings.

### **3. Notification via HTTP server**

#### **■ Basic Setting > Network > Notification of IP Address Change > HTTP Notification**

Server: the address of the server, i.e. http://.

Port: the port to access HTTP. The default setting is 80 (recommended).

Parameter: the setting of the parameters, refer to the installation setting of your HTTP server.

Refer to the installation setting of your HTTP server for the setting of the parameters (such as Username, Password, and Proxy).

Select **Save** to complete and activate your settings.

[Live View](#) | [Setting](#)

### IP SPEED DOME

**Basic Setting**

[System](#)

[Video / Image](#)

[Audio](#)

[User](#)

[Network](#)

[Network](#)

[Streaming](#)

[PPPoE](#)

[DDNS](#)

[UPnP](#)

[SMTP](#)

[SMB](#)

[Notification](#)

[Multicast](#)

[Date / Time](#)

[IP Filtering](#)

**Application Setting**

[Event](#)

[Motion Detection](#)

[Firmware Upgrade](#)

[Factory Default](#)

[Reboot](#)

#### Notification of IP address Change

**SMTP Notification**

SMTP Notification ☐ Enable ☒ Disable

SMTP SendTo

SMTP Subject

**FTP Notification**

FTP Notification ☐ Enable ☒ Disable

FTP Server

FTP Port

FTP Upload Path

FTP Login Name

FTP Login Password

**HTTP Notification**

HTTP Notification ☐ Enable ☒ Disable

Server

Port

Parameter

User Name

Password

Proxy Address

Proxy Port

Proxy username

Proxy Password

Notification of IP change

## Basic Setting >\ Network >\ Multicast

This function allows multiple people to watch video streaming without limitation on the number of users, but is only applicable in the LAN environment. The video streaming format (MPEG4/MJPEG) depends on the selected image format setting in Basic Setting → Video/Image → Video Format.

### Basic Setting >Network >Multicast>MPEG4

This function allows multiple users to view the MPEG4 video stream free from restrictions on the number of users. However, this is only effective within the LAN.

### Basic Setting >Network >Multicast>Motion JPEG

This function allows multiple users to view the Motion JPEG video stream free from restrictions on the number of users. However, this is only effective within the LAN.

## Basic Setting

[System](#)[Video / Image](#)[Audio](#)[User](#)[Network](#)[Network](#)[Streaming](#)[PPPoE](#)[DDNS](#)[UPnP](#)[SMTP](#)[SMB](#)[Notification](#)[Multicast](#)[Date / Time](#)

## Application Setting

[Event](#)[Motion Detection](#)[Privacy Mask](#)[Firmware](#)[Upgrade](#)[Factory Default](#)[Reboot](#)

## Multicast Setting

## MPEG4 (Main Stream)

|               |                                                               |                               |
|---------------|---------------------------------------------------------------|-------------------------------|
| Enable        | <input type="radio"/> On <input checked="" type="radio"/> Off |                               |
| Video Address | 224.1.1.1                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Video Port    | 1234                                                          | (2~65534, Even)               |
| Video TTL     | 5                                                             | (1~255)                       |
| Audio Address | 224.1.1.1                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Audio Port    | 1236                                                          | (2~65534, Even)               |
| Audio TTL     | 5                                                             | (1~255)                       |
| Event Address | 224.1.1.1                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Event Port    | 1238                                                          | (2~65534, Even)               |
| Event TTL     | 5                                                             | (1~255)                       |

## MPEG4 (Sub Stream)

|               |                                                               |                               |
|---------------|---------------------------------------------------------------|-------------------------------|
| Enable        | <input type="radio"/> On <input checked="" type="radio"/> Off |                               |
| Video Address | 224.1.1.2                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Video Port    | 1234                                                          | (2~65534, )                   |
| Video TTL     | 5                                                             | (1~255)                       |
| Audio Address | 224.1.1.2                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Audio Port    | 1236                                                          | (2~65534, )                   |
| Audio TTL     | 5                                                             | (1~255)                       |
| Event Address | 224.1.1.2                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Event Port    | 1238                                                          | (2~65534, )                   |
| Event TTL     | 5                                                             | (1~255)                       |

## Motion JPEG

|               |                                                               |                               |
|---------------|---------------------------------------------------------------|-------------------------------|
| Enable        | <input type="radio"/> On <input checked="" type="radio"/> Off |                               |
| Video Address | 224.1.1.3                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Video Port    | 1234                                                          | (2~65534, )                   |
| Video TTL     | 5                                                             | (1~255)                       |
| Audio Address | 224.1.1.3                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Audio Port    | 1236                                                          | (2~65534, )                   |
| Audio TTL     | 5                                                             | (1~255)                       |
| Event Address | 224.1.1.3                                                     | (224.1.1.1 ~ 239.255.255.255) |
| Event Port    | 1238                                                          | (2~65534, )                   |
| Event TTL     | 5                                                             | (1~255)                       |

Save

Reset

## [Basic Setting > Date/Time \(date/time setting\)](#)

The screenshot shows the 'IP SPEED DOME' web interface. The top bar has 'Live View' and 'Setting' links. The left sidebar lists navigation options: Basic Setting, System, Video / Image, Audio, User, Network, Date / Time, IP Filtering, Application Setting, Event, Motion Detection, Firmware Upgrade, Factory Default, and Reboot. The main content area is titled 'Date / Time Setting' and contains three sections: 'Server Time' with date and time input fields, 'Time Setting' with date and time input fields, and another 'Time Setting' section with radio buttons for 'Synchronize with PC's time', 'NTP', and 'User Input'. Below these are input fields for NTP Server 1, NTP Server 2, NTP Server 3, Date, Time, and Time Zone, followed by 'Save' and 'Reset' buttons.

Date /Time setting

- **Basic Setting > Date/Time > Server Time (the date/time of the server)**
- **Basic Setting > Date/Time > PC Time (the date/time of your PC)**
- **Basic Setting > Date/Time > Time Setting (date/time setting)**

There are three ways to synchronize the time.

**1. Synchronize the time with PC's time:**

The preset method of time synchronization of the camera time with your PC time.

**2. Get Time from an NTP server: synchronize the time with the NTP (Network Time Protocol)**

- Click on the “NTP” Button
- Enter the NTP server's IP address.
- Press “SAVE” to activate it.

The camera will update its time once obtaining the NTP time.

**Note: The default NTP servers are:**

- A. NTP Server 1: 198.123.30.132**
- B. NTP Server 2: 192.43.244.18**
- C. NTP Server 3: 133.100.9.2**

**3. Change the time manually:**

- Click the “User Input”.
- Select the format of date display, i.e. “yyyy/mm/dd” format.
- Select the format of date display, “hh:mm:ss” by 24 hours format.
- Select the time zone.
- Select “Adjust” to adjust time.

## [Basic Setting > IP Filter](#)

This function filters IP addresses and is able to allow or deny visits from particular addresses/target addresses

The screenshot shows the 'IP SPEED DOME' web interface. At the top right, there are links for 'Live View' and 'Setting'. The left sidebar contains a 'Basic Setting' section with links for System, Video / Image, Audio, User, Network, Date / Time, IP Filtering, Application Setting, Event, Motion Detection, Firmware Upgrade, Factory Default, and Reboot. The main content area is titled 'IP Filtering Setting' and includes a 'General' tab. Under 'General', there are two settings: 'IP Filtering' with radio buttons for 'Enable' and 'Disable' (selected), and 'Policy' with radio buttons for 'Allow' and 'Deny' (selected). Below these are 'Save' and 'Reset' buttons. A section titled 'Filtered IP Address' contains a large text input field. At the bottom of this section are 'Add', 'Remove', and 'Remove All' buttons.

IP filter setting

### **Basic Setting > IP Filter > General**

IP Filtering: enables/disables the IP filter

Policy: allows/denies access

### **Basic Setting > IP Filter > Filter IP Address (Overview of the set IPs)**

**Add**: enter the IP address you want to allow or deny the access of in the front field.

**Remove**: removes a set IP addresses

**Remove All**: removes all the set IP address

### **Special Attention**

#### **Setting rules:**

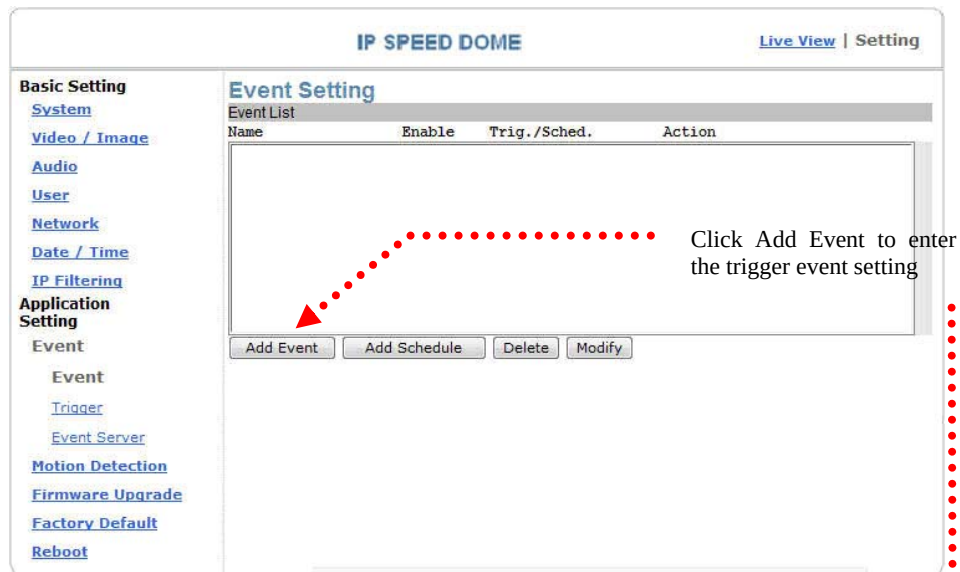
- 1. Actions that may cause a limited connection are to be denied.**
- 2. Improper use of this function may cause disconnection from Internet. You might need to use hardware reset to reset to the factory default. Please refer to the “Factory Default” for details.**

# Application Setting

## [Application Setting > Event \(event trigger setting page\)](#)

This camera is equipped with intelligent security management functions. It ensures security monitoring by allowing user to define “trigger events” based on particular times and situations, and sets the camera respond to the event.

## Application Setting > Event > Event List (trigger event setting)



### Event Setting

General

Name

New0

Response to event trigger

☒ Always

☐ During time

☐ Sun
☐ Mon
☐ Tue
☐ Wed
☐ Thu
☐ Fri
☐ Sat

Start from

00:00

Duration

00:00

(max 168:00 hours:minutes)

☐ Never

Trigger by

☐ Alarm input

☐ Alarm input1
☐ Alarm input2

☐ Motion Detection

☐ Area 1
☐ Area 2
☐ Area 3

☐ On boot

Response process

☒ Active alarm out

☒ Alarm Out1

Duration

0

Seconds

☒ Upload video/image to server

Base file name

img

.avi

File format

MPEG4 (Main Stream)

☒ Add date/time suffix
☒ Add sequence number suffix up to

0

and then start over.
Upload Server Type :

☒ FTP

-----

☐ SMTP To mail address

-----

Subject

-----

☒ Include pre-trigger buffer :

0

Seconds
☒ Include post-trigger buffer :

0

Seconds
☒ Continue video upload :

0

Seconds

Recording Storage Device :

☐ Samba

☒ Include pre-trigger buffer :

0

Seconds
☒ Include post-trigger buffer :

0

Seconds
☒ Continue video upload :

0

Seconds

☒ Send HTTP notification

-----

Custom parameters

-----

Message

-----

☒ Send TCP notification

-----

Message

-----

☒ Go to preset location

-----

☐ Return to home after event

Save

Cancel

## **Add Event**: Add Event setting page

### **Options:**

- **General:**

Name: Name the trigger event here.

- **Response to event trigger: the time setting of the trigger event**

Always: Always monitoring

During time: Check the date you want to monitor (Sun~Sat) and the duration of monitoring here. For example, if you want to set the camera to monitor from 7 pm after work to 7 am next morning from Monday to Friday, check the boxes from Monday to Friday, enter “19:00” in the “Start From” field, and enter “12:00” in the “Duration” field.

Never: Do not set the time.

- **Trigger by: sources of trigger events (Note: You can only set one trigger event once.)**

Alarm input: The alarm is triggered by the security equipment connected from the DI terminals behind the machine, such as door/window detectors, infrared sensors.

Motion Detection: The alarm is triggered when motion is detected. The camera will send an alarm when any objects appear in the set detection area.

On boot: The alarm is triggered by reboot. The camera will send an alarm when the system is rebooted due to power shortage, sabotage, or other reasons.

- **Response process: trigger event response (Note: Multiple selections are available)**

Active alarm An event is detected by the security equipment connected from the

- out: DI terminal behind the machine, such as high-decibel alarms, light projectors. You can set the alarm duration in the “Duration” field.
- Upload video to : The camera will sent the capture Motion JPEG or MPEG4 video of the event to the FTP server or Samba you specified.
- Include pre-trigger buffer:When an event is detected,the camera will record the previous video image up to 10 seconds.
- Include post-trigger buffer:When an event is detected,the camera will record the post video image up to 10 seconds.
- Continue video upload: When the event is continue, the camera will record the viddeo image up to 10 seconds.
- For example: If the pre-trigger 5 seconds, post-trigger 5 seconds and continue video upload 5 seconds have been selected, the total file size will be 15 seconds.
- Upload img to : The camera will sent the capture photo of the event to the FTP server or Samba you specified.
- Send HTTP notification: The alarm will be sent to the HTTP server you specified. To use this function, set the coordinative HTTP server in the Event Server setting page in advance.
- Send TCP notification: The alarm will be sent to the TCP Server you specified. To use this function, set the coordinative TCP server in the Event Server setting page in advance.
- Go to Preset Location Force the camera turn to the preset location when the trigger is detected.
- Day Night Force the camera turn into Day/Night Mode when the trigger is detected.
- Click Save to save and activate your settings when you completed setting.

**Add Schedule:** Add Schedule setting page

**Schedule Setting**  
**General**

Name

**Response to event trigger**

☐ Always

☐ During time ☐ Sun ☐ Mon ☐ Tue ☐ Wed ☐ Thu ☐ Fri ☐ Sat

Start from  Duration  (max 168:00 hours)

☐ Never

**Response process**

☐ Active alarm out 1 Duration

☐ Active alarm out 2 Duration

☐ Active alarm out 1 Duration

☐ Send mail To mail address

Subject

☐ Upload image to FTP server

☐ Send HTTP notification

Custom parameters

Message

☐ Send TCP notification

Message

☐ Go to preset location

☐ Return to home after event

☐ Tour

☐ Samba

The Add Event setting page and the Add Schedule setting page are basically the same except that the Add Schedule setting page does not have the option “Trigger by” to indicate the sources of the trigger event.

Click **Save** to save and activate your settings when you complete setting.

**Delete:** delete the event cluster setting.

**Modify:** modify the event cluster setting.

## **Application Setting > Event > Trigger (manual test of trigger response)**

Whenever the camera detects abnormal events during the scheduled time, it will automatically respond by performing trigger response. There are 3 types of trigger responses: alarm sending, LED status indicator flash, and emailing the alarm or recorded image to the specified server. To use this function, enter the server information by accessing Application Setting > Event > Event Server. You may perform manual test as specified in this section once you complete the setting to ensure that all functions are working properly.

The screenshot shows the 'IP SPEED DOME' web interface. The top navigation bar includes 'Live View' and 'Setting'. The left sidebar lists various configuration categories. The 'Trigger Setting' page is active, displaying several configuration sections:

- Alarm Input Setting:** Four rows for Alarm input 1 through 4, each with a 'Normal Grounded' button and a 'Normal Open' button.
- Trigger Alarm output:** Two rows for Alarm output 1 and 2, each with 'Set' and 'Clear' buttons.
- Trigger mail:** Fields for 'To mail address' and 'Subject', with a 'Set' button.
- Trigger FTP:** A dropdown menu for 'Trigger FTP' and a 'Set' button for 'Upload AVI file to FTP server'.
- HTTP Server:** A dropdown menu for 'HTTP Server' and a 'Set' button for 'Message'.
- TCP Server:** A dropdown menu for 'TCP Server' and a 'Set' button for 'Message'.
- Trigger SAMBA:** A text field for 'PATH' and a 'Set' button.

Trigger setting

The default status of the digital input pin is set as “Normal Open”, but users can change it to “Normal grounded” by setting the page “Setting->Application->Event->Trigger”:

1. When alarm input is set to be “Normal Open”, then the external device connected to alarm input pin should be in open status. So when the external device is triggered to close status, the alarm input pin will be triggered.
2. On the contrary, when alarm input pin is set to be “Normal Grounded”(see the figure below), then the external device connected to alarm input pin should be in close status. So when the external device is triggered to open status, the alarm input pin will be triggered.

### Trigger Alarm output: Alarm output

Click “Set” to trigger the alarm. Click “Clear” to stop the alarm.

### Trigger LED: LED indicator display

LED: Event status: click “Set” to turn on the LED event status indicator. Click “Clear” to turnoff the indicator.

LED: Link status : click “Set” to turn on the LED Link status indicator. Click “Clear” to turnoff the indicator.

### Trigger mail: Sending mail

Click “Set” after you enter the email address and subject to test the integrity of the sent mail.

### Trigger FTP: Sending AVI file to FTP Server

Upload AVI files to FTP server to test the file integrity.

### HTTP Server: Sending message to HTTP Server

Upload message to HTTP server to test the message integrity. Enter the message in the “Message” field. You may go to Application Setting > Event > Event Server to make a complete custom parameters settings.

### TCP Server: Sending message to TCP Server

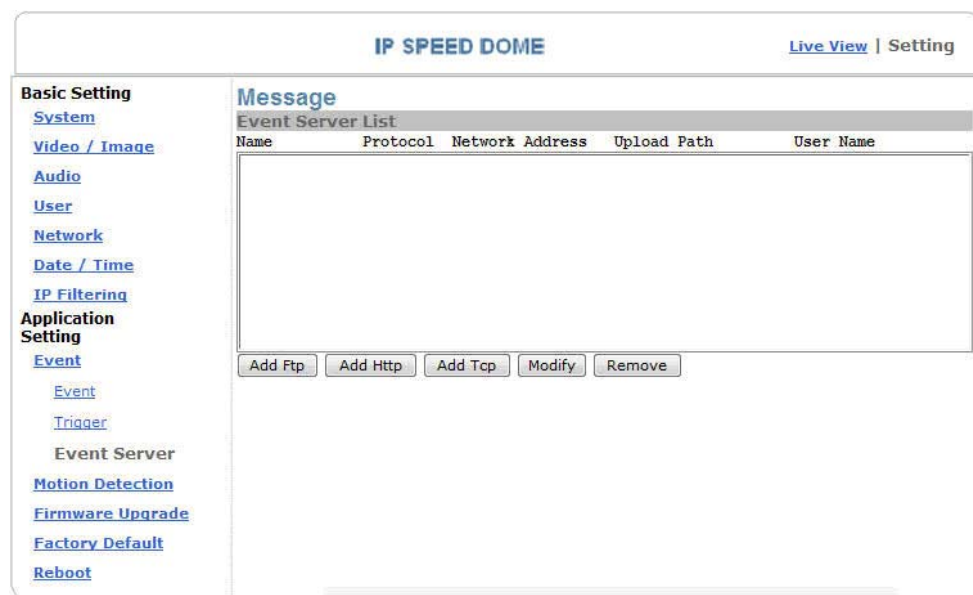
Enter the message in the “Message” field.

### Trigger SAMBA: Sending message to Samba shared folder

Path: Enter the path of the shared folder in your PC.

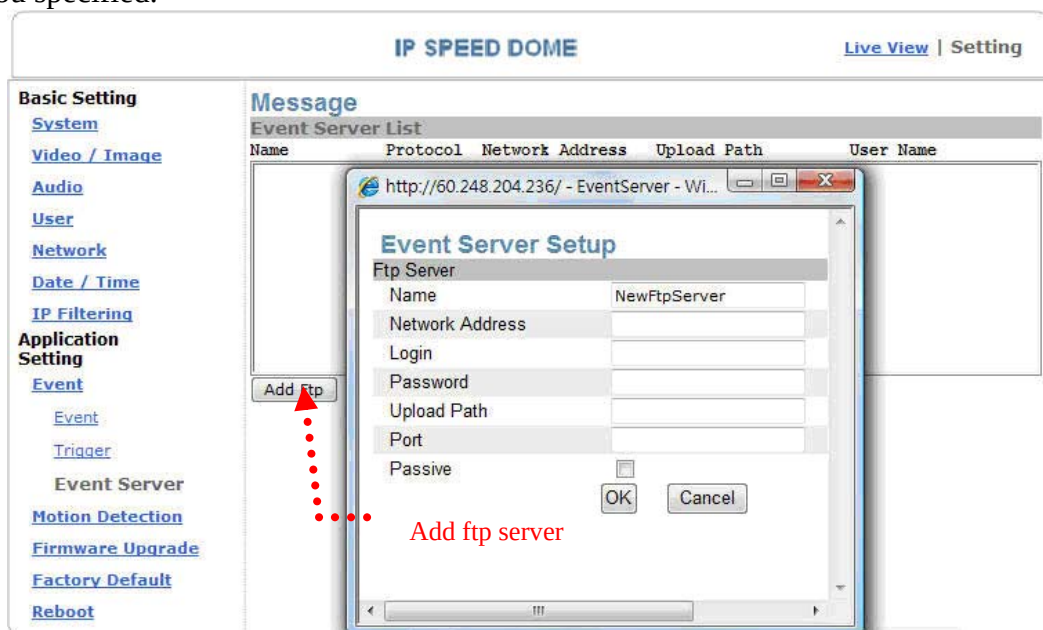
## Application Setting > Event > Event Servers (setting for uploading trigger event file to the server)

Here you can perform a complete setting for uploading files to the server. Please set servers (SMTP, FTP, SAMBA...etc) in the Event Server setting by the instructions below:



Event server

Click **Add Ftp** to go to the setting page and enter the information of the FTP server you specified.



Name: the name of the FTP

Network Address: IP address of the FTP

Login: Log-in name

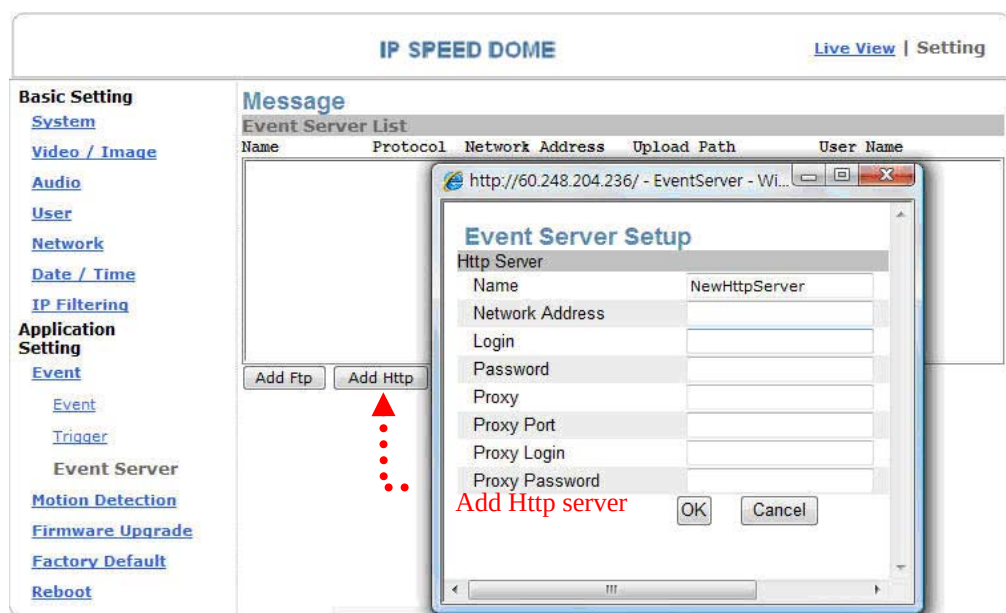
Password: Log-in password

Upload Path: Uploading path

Port: Port

Passive: Check to set the FTP status as passive

Click **Add Http** to go to the setting page and enter the information of the HTTP server you specified.



Name: HTTP name

Network Address: HTTP IP address

Login: Log-in name

Password: Log-in password

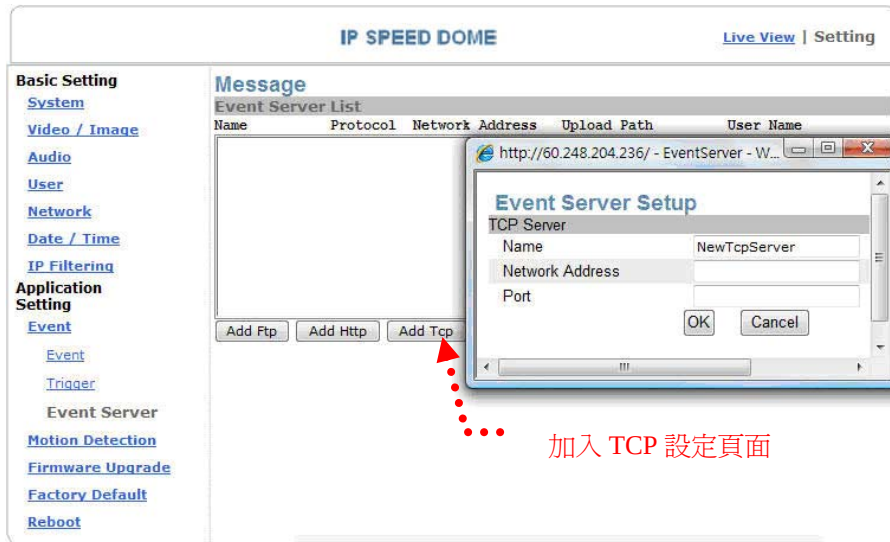
Proxy: Proxy server name

Proxy Port: Proxy server port

Proxy Login: Proxy server log-in name

Proxy Password: Proxy server log-in password

Click **Add Tcp** to go to the setting page and enter the information of the TCP server you specified.



Name: TCP server name

Network Address: TCP IP address

Port: TCP port

**Modify:** Modifies the setting value

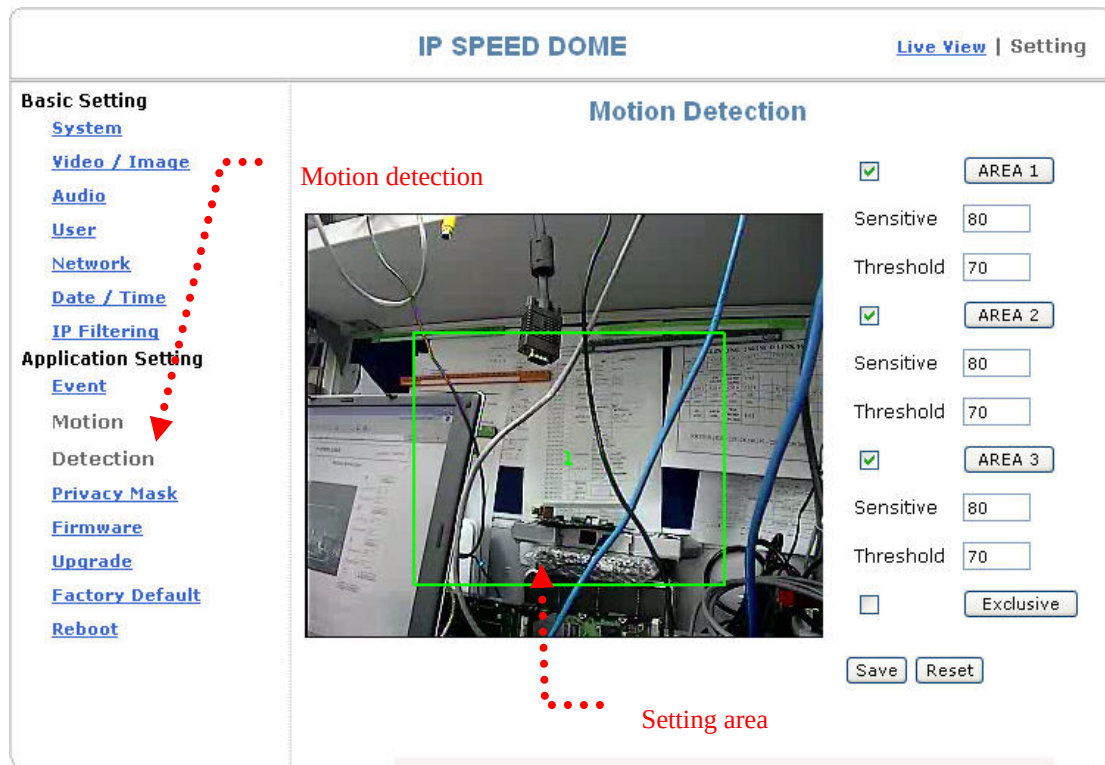
**Remove:** Removes the setting value

## **Application Setting > Motion Detection**

You can open the setting frame by clicking on the area to monitor. To move area to monitor, drag the area with your mouse; to adjust the size of the frame, drag the arrow to adjust after you move the mouse to the edge of the area and left-click; There are 3 frames available for setting. You may adjust the sensitivity of the area by entering the degree of sensitivity in the “Sensitive” field. “1” is least sensitive, “100” is extremely sensitive.

Select **Save** to complete and activate your settings.

.



## Application Setting > Privacy mask

The privacy zone function can mask the image in the mask zone to ensure confidentiality. First, select a mask zone (A to X) and a mask color (Color 0 or Color 1) in the privacy zone. Then, move the green frame to the area you want to mask. Moving the cursor to the bottom right corner of the frame can change the size of the frame. When the setting is completed, click Save to make the setting effective, and the screen will automatically refresh within a few seconds after the setting is effective.

Note: No more than 8 privacy zones can be displayed on the screen. If more than 8 zones are set, they are displayed according to the priority (A is the highest, and X is the lowest). When the setting is completed, the computer reads the new setting and it takes about one minute to return to the live image screen. Please be patient.

**IP SPEED DOME**
[Live View](#) | [Setting](#)

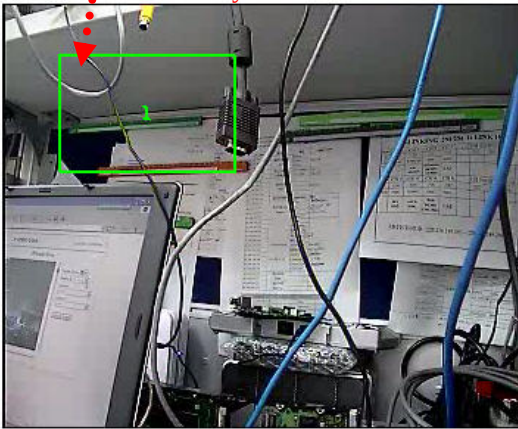
**Basic Setting**

- [System](#)
- [Video / Image](#)
- [Audio](#)
- [User](#)
- [Network](#)
- [Date / Time](#)
- [IP Filtering](#)

**Application Setting**

- [Event](#)
- [Motion Detection](#)
- [Privacy Mask](#)
- [Firmware](#)
- [Upgrade](#)
- [Factory Default](#)
- [Reboot](#)

### Privacy Zone



+3.7

Mask Zone

Mask A No Mask

Color0 Black

Color1 Black

[Save](#) [Reset](#)

- +0

Privacy area

Mask color setting

**IP SPEED DOME**
[Live View](#) | [Setting](#)

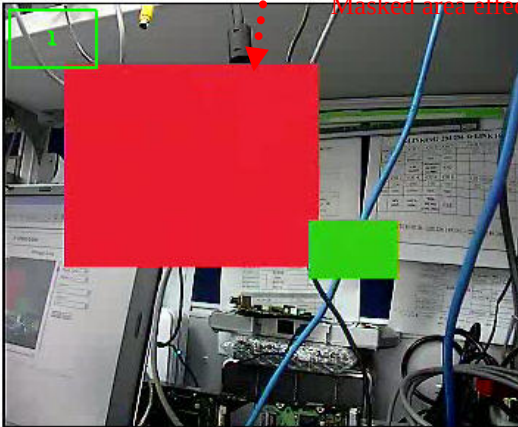
**Basic Setting**

- [System](#)
- [Video / Image](#)
- [Audio](#)
- [User](#)
- [Network](#)
- [Date / Time](#)
- [IP Filtering](#)

**Application Setting**

- [Event](#)
- [Motion Detection](#)
- [Privacy Mask](#)
- [Firmware](#)
- [Upgrade](#)
- [Factory Default](#)
- [Reboot](#)

### Privacy Zone



+3.7

Mask Zone B

Mask B Color0

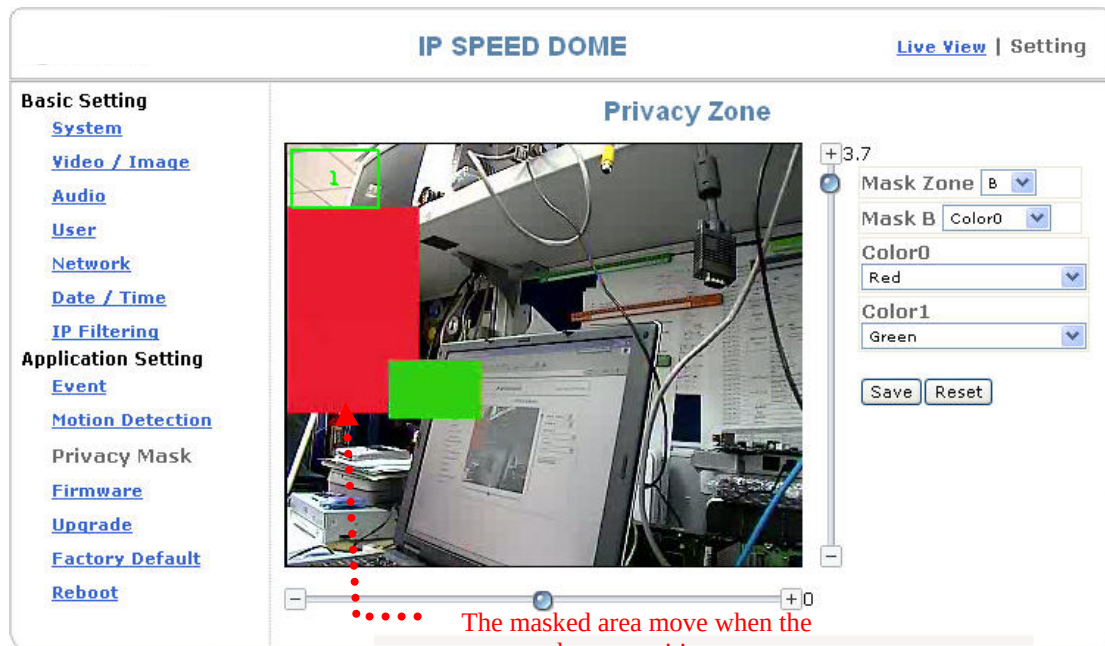
Color0 Red

Color1 Green

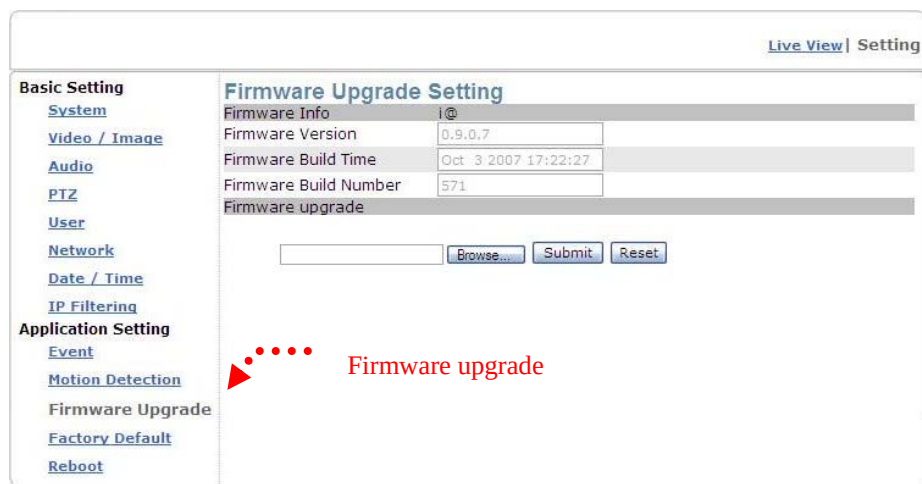
[Save](#) [Reset](#)

- +0

Masked area effect



## Application Setting > Firmware upgrade

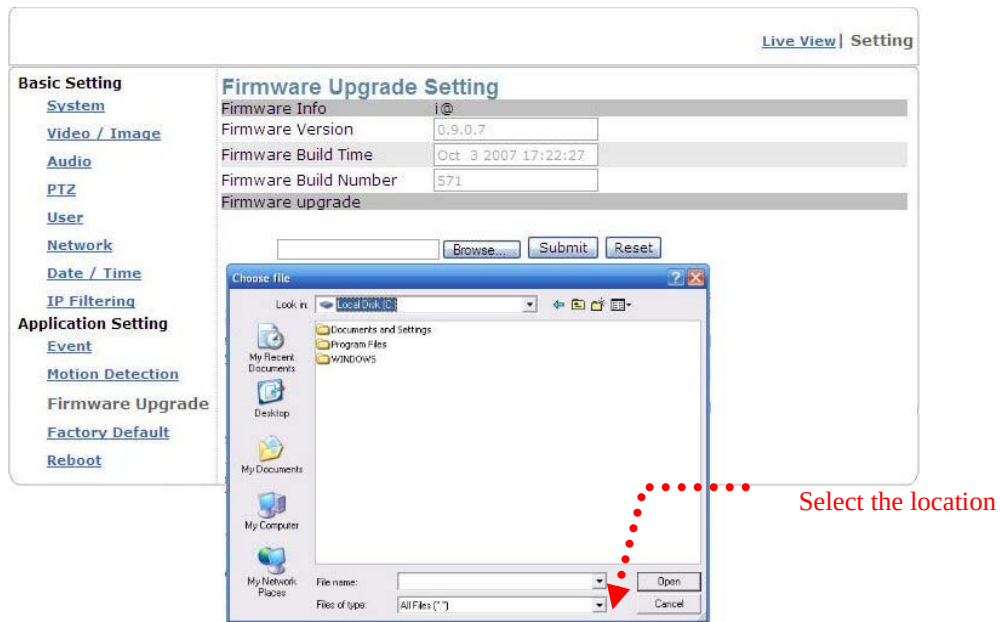


Contact your dealer for more information about firmware upgrade. The sales representative will transmit the latest version to you via e-mail. When you receive the firmware, decompress the file (**uImage.gz**) to your PC and follow the steps below to execute the upgrade.

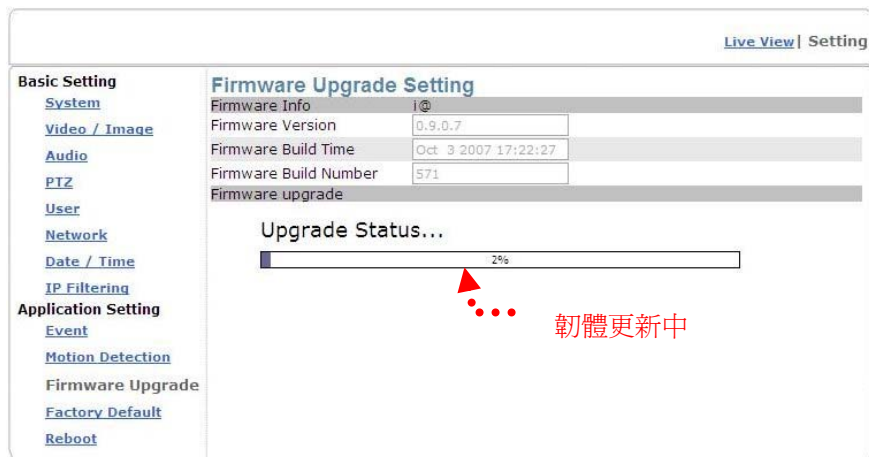
### **Important! Read Carefully!!**

1. Close all active applications on your PC.
2. Select "Firmware Upgrade"

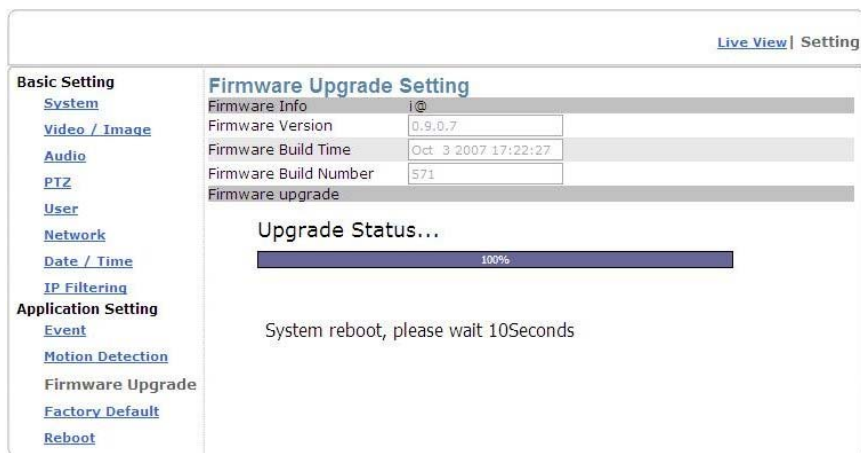
The Firmware Upgrade Setting page appears.



3. Click **Browse...** to select the location where the firmware file is stored.
4. Click **Submit**.
5. The auto upgrade runs. The Upgrade Status shows the progress of the upgrade.



When the firmware upgrade has been completed, the machine reboots automatically. Reconnect to the server after 60 seconds.

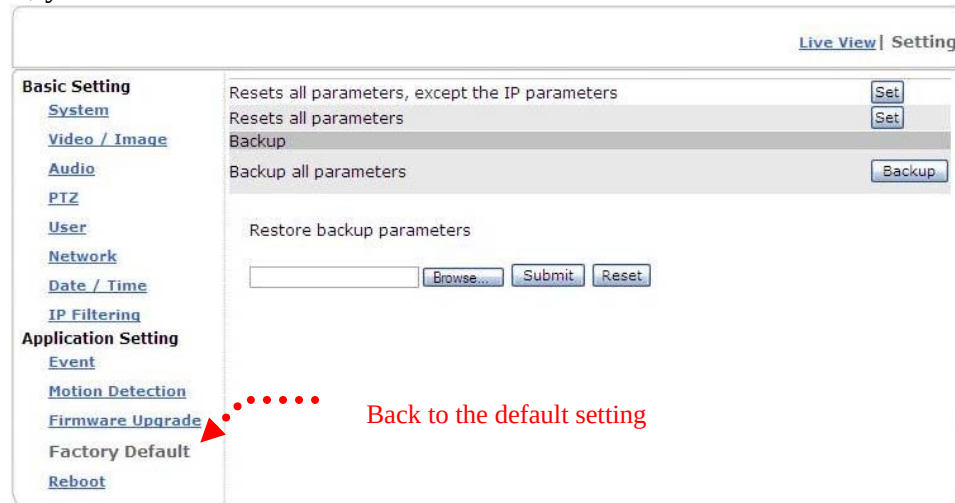


**Note:** The new firmware is burned into the Flash ROM during the upgrade, so you must take care during the process and make sure it is not interrupted during the operation. The system may be damaged seriously and need to be returned to the factory for repair if the power cable is removed or becomes loose during the upgrade. Firmware upgrading in a wireless network environment is not recommended because unstable packet transmission may bring about loss of data.

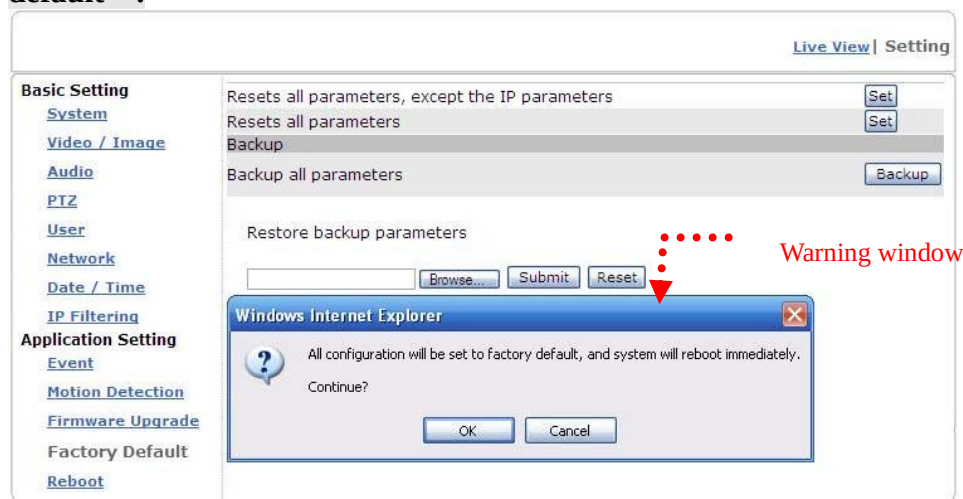
When the firmware upgrade has been completed, you don't need to restart the camera manually. The camera will reboot automatically after 60 seconds (Reboot OK). Then open the IE browser and key in the IP address (The original IP address remains undeleted).

## [Application Setting > Factory Default](#)

You can use this function to reset to factory default, but all changes, including the IP address, you have made are deleted.



### **Factory Default: Reset to factory default .**



### **Resets all parameters, except the IP parameters:**

You can use this function to reset to factory default. All changes you have made are deleted but the IP address and all settings relevant to networking remain valid, including cable and wireless network settings. Click **Set** to complete the reset.

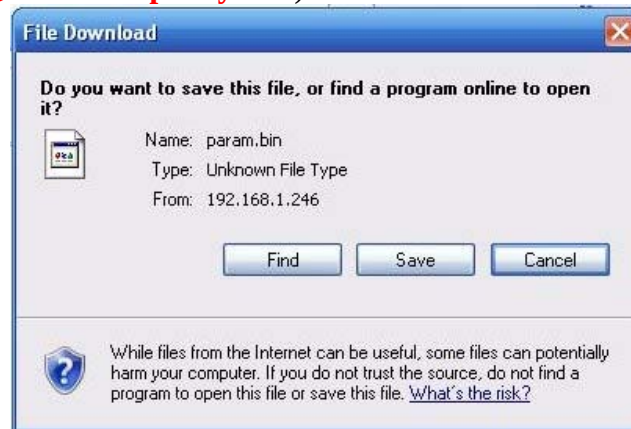
### **Resets all parameters:**

You can use this function to reset to factory default. All changes, including the IP address, you have made are deleted. Click **Set** and a warning window appears to ask if you really want to reset to factory default. Click “OK” to complete the reset.

## Backup: Data backup

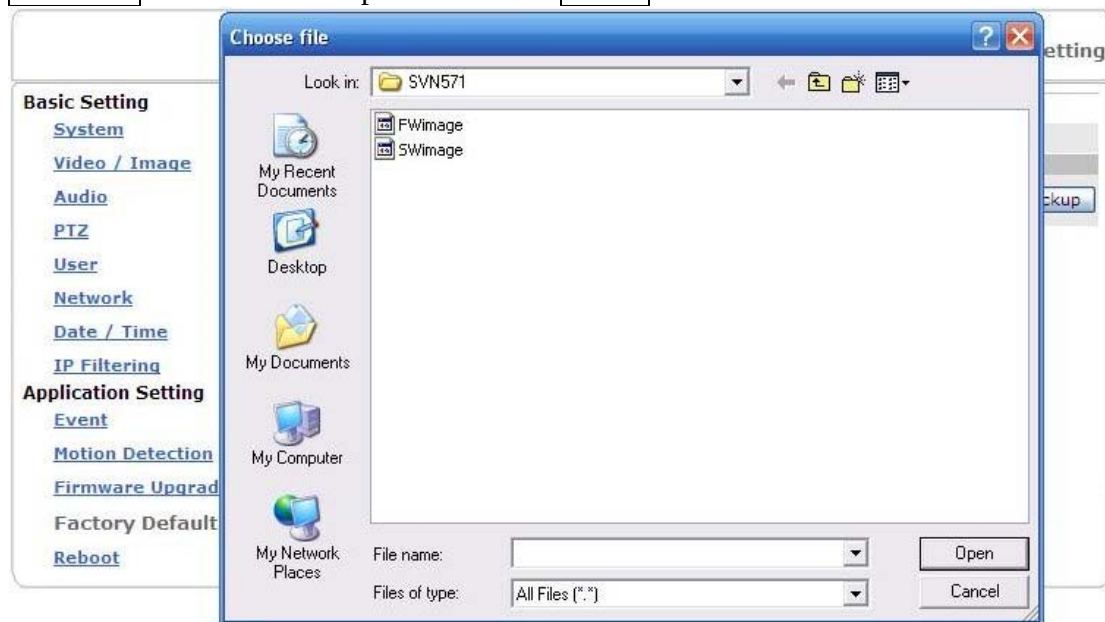
### Back all parameters:

Back up all changes you have made. When you click **Backup**, a file download window appears. Back up the file named param.bin (**Attention: Don't change the file name; otherwise, the backup may fail.**)



### Restore backup parameters:

You can select this function to restore the changes you have made. To do this, click **Browse...** to select a backup file and click **submit** to confirm the restoration.



## [Application Setting > Reboot](#)

You can enable this function for the camera to reboot automatically ◦

IP SPEED DOME

[Live View](#) | [Setting](#)

Basic Setting

[System](#)

[Video / Image](#)

[Audio](#)

[User](#)

[Network](#)

[Date / Time](#)

[IP Filtering](#)

Application Setting

[Event](#)

[Motion Detection](#)

[Firmware Upgrade](#)

[Factory Default](#)

Reboot

Reboot Setting

Reboot

Reboot Now

Reboot

## Attachment A: External Alarm

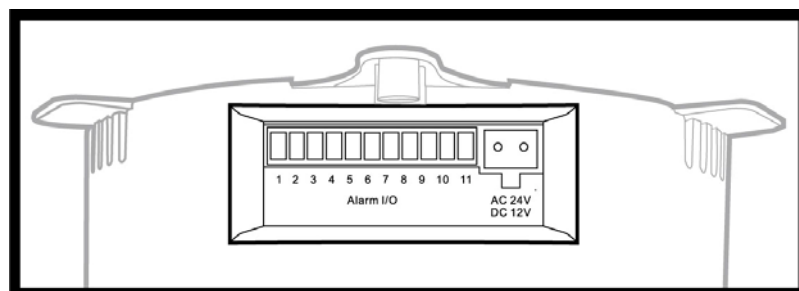
In addition to the motion detection executed by the internal software application, the product can connect to external infrared detectors, beepers, and smoke detectors. For more information about these external devices, contact to your local retailer, dealer or installation service provider. This product provides a standard Alarm I/O for you.

This camera provides 2 sets of digital inputs (DIs) and 1 set of digital outputs (DOs). Pins 4 and 5 are designed for connection to external Sensor 1; Pins 4 and 6 for external Sensor 2. All 3 pins are designed for connection to the C connection equipment and should not access to voltage or current. Otherwise, the product will be damaged. Pins 7, 8 and 9 are relays to normally open (NO) or close (NC) these external devices. These 3 pins only act as relay output contacts and no power is output (dry contacts).

The default status for this DI sets is NO. The gray color indicates the current status. NC status can be selected by selecting Setting/ Application Setting/ Event/ Trigger/ Alarm Input Setting.

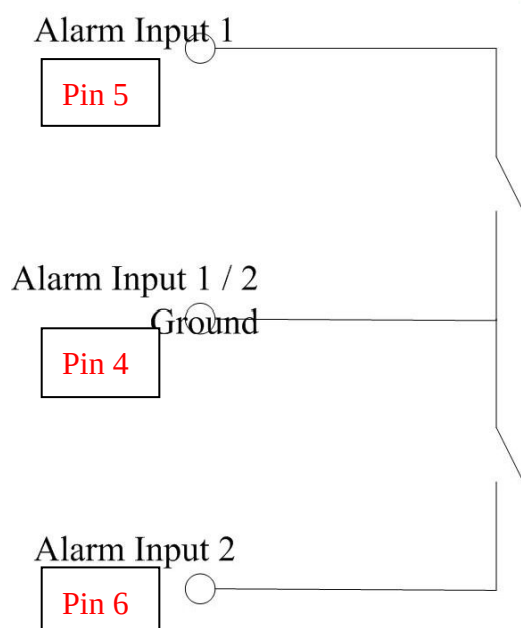
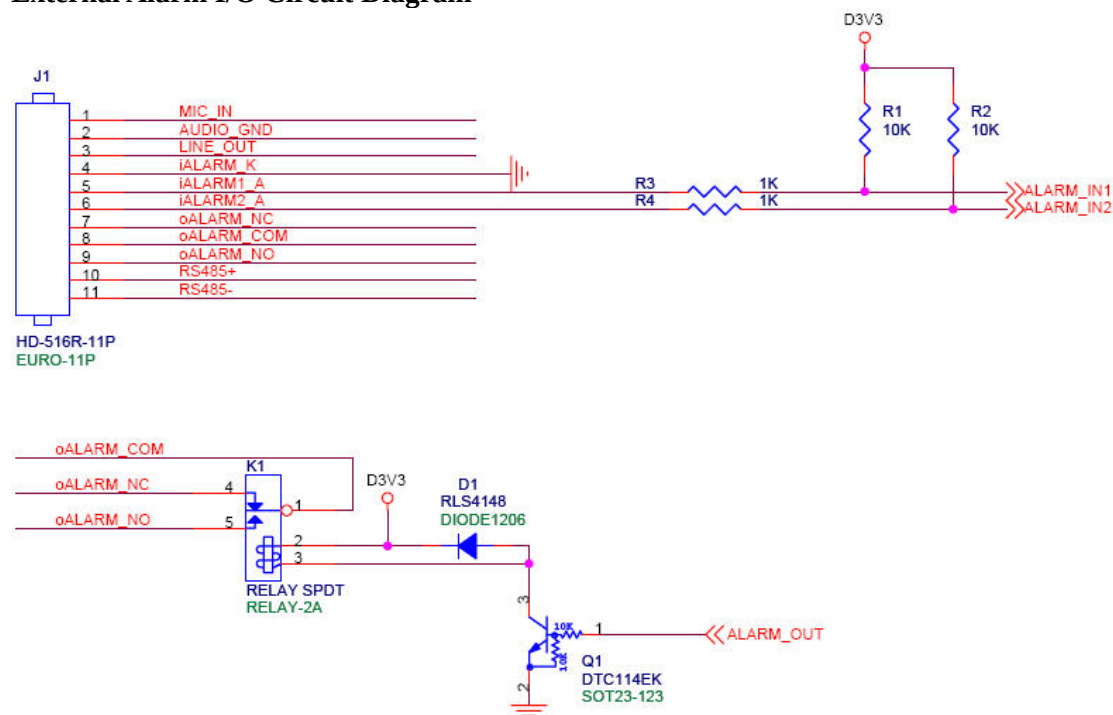
Applications:

1. When the status is NO, the connected C connection equipment should be NO as well. When the C connection equipment is triggered, the status will change to NC. The machine will detect this change and inform the system.
2. When the status is NC, the connected C connection equipment should be NC as well. When the C connection equipment is triggered, the status will change to NO. The machine will detect this change and inform the system.



| Pin | Function             |
|-----|----------------------|
| 1   | MIC IN               |
| 2   | AUDIO_GND            |
| 3   | LINE OUT             |
| 4   | Alarm Input #1/2 (K) |
| 5   | Alarm Input #1 (A)   |
| 6   | Alarm Input #2 (A)   |
| 7   | Alarm Output (NC)    |
| 8   | Alarm Output (COM)   |
| 9   | Alarm Output (NO)    |
| 10  | RS485+               |
| 11  | RS485-               |

## External Alarm I/O Circuit Diagram



**Warning!** The alarm will be triggered when alarm pin 4 & 5 are formed as a short circuit.

Please do not connect the electric voltage or current into alarm input pin because the electronic current

**Warning!** The alarm will be triggered when alarm pin 4 & 6 are formed as a short circuit.

Please do not connect the electric voltage or current into alarm input pin because the electronic current

### Warning!

- Where connecting of a low or high current loop to the external alarm input/output of the product is required, the wiring and connection shall be conducted by a qualified electrician. Incorrect wiring may bring about damage to the product fatal electric shock.
- Direct connection of the external alarm input/output terminal to high-current equipment is not allowed and a customized repeat circuit might be required (provided by the customer) for some cases to isolate the terminal and the high-current equipment. Where the voltage/current of an external device exceeds the loading capability (5V) of the Alarm I/O, the product would be damaged seriously.

## Attachment B: Bandwidth Estimation

Since the FPS is dependent on the bandwidth of the camera, the relationship between the size of an image file and the bandwidth is always the major concern of the system construction engineer.

The table below shows the relation between the resolution and size of an MJPEG file in the NTSC system. Please note that the values in the table are for reference only, because the size of an image file is closely related to the complexity of the environment and the actual situation of the place being monitored.

| Image Resolution | Average range of Data Sizes |
|------------------|-----------------------------|
| 176 x 144 (QCIF) | 20 – 40k bit                |
| 352 x 288 (CIF)  | 40– 200k bit                |
| 704 x 576 (D1)   | 200 – 530k bit              |

Ex.: The transmission speed on the Internet is 2fps under 352 x 240, i.e.  $40k \times 2 = 80k$  to  $200 \times 2 = 400k$  per second. It is suggested to apply for 512K "upload" bandwidth.

Note 1: What the camera needs at the client end is the "upload" bandwidth. However, most ISPs in Taiwan provide download bandwidth that is wider than the upload bandwidth. Therefore, symmetrical bandwidth is a good choice for users who need wider upload bandwidth. Ex. download/upload = 521K/512K

Note 2: 32 kbps to 64kbps is required for transmission of audio signals.

## Attachment C: Troubleshooting and FAQs

| Question                                                                                 | Answer and Solution                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Function</b>                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| What encoder and decoder are used by the camera for sounds and images?                   | The camera uses MJPEG or MPEG4 compression technology to provide quality images. MJPEG is a standard image compression technology applicable to different browsers without the need to install additional software. MPEG4 is next-generation image compression standard and can provide high image quality at low bandwidth.<br>The sound decoder uses G.726 compression technology.                                                                                                                                                                                                                                                                              |
| How many users are allowed to view the camera simultaneously?                            | The maximum number of viewers depends on the bandwidth of the client accessing the camera. About 5~6Mbps are used to process data of the camera, so the maximum number of viewers changes in proportion to FPS and the resolution of the image. Obviously, the higher the number of viewers, the lower the performance at each client ends.                                                                                                                                                                                                                                                                                                                       |
| Is it possible to catch the image from the camera in a real-time manner?                 | Yes, you can use the snapshot function from the main control page.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Camera Installation</b>                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Can the camera be used outdoors?                                                         | The camera is not waterproof, so a special waterproof cover must be available for outdoor use. Please note that the waterproof cover may affect the built-in pickup function of the camera.                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Link LED does not light up.                                                              | <ul style="list-style-type: none"> <li>• Check that the attached standard transformer is not damaged. Plug the power cable and reboot the machine.</li> <li>• If the problem remains, contact your dealer for help.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| What network cable is used for the camera?                                               | The camera uses a 10 or 100 Base-T Category 5 UTP network cable.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| How to install and operate the camera behind a firewall?                                 | If you have a firewall in your network environment, please select HTTP mode (Port80). Generally the port 80 is always open for the browser to access the Internet.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| What are the username and password for the first use and after reset to factory default? | Username = <b>root</b><br>Password= <b>root</b> .<br>Please change your password immediately after entering the system to ensure information security.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| I forgot the username and password I used for the setting. What should I do?             | Please proceed as follows: <ol style="list-style-type: none"> <li>1. Hold the Reset button for 4 seconds after booting to reset the password to preset.</li> <li>2. Change the username and the password.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| I forgot the IP address of the camera. What should I do?                                 | Use IP Finder to locate the IP address of the camera.<br>Please connect the camera and the PC on which the IP finder is executed to the same hub.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| IP Finder cannot find the camera.                                                        | <ul style="list-style-type: none"> <li>• When the camera still can't be located over 1 minute, re-activate the camera.</li> <li>• Do not connect the camera to more than one router. The IP Finder will not be able to detect the camera.</li> <li>• If the IP of PC on which the IP Finder is executed is not correctly set, the IP Finder will not be able to locate the camera. Please confirm that the IP address has been properly set.</li> <li>• The anti-virus applications on the PC or the firewall might block the IP Finder from execution. If you can not execute the IP Finder, please disable your anti-virus applications or firewall.</li> </ul> |

|                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Internet Explorer does not display the camera screen correctly.                           | Please be sure that the version of your Internet Explorer is 6.0 or later. Should you have any difficulties, please log on the Microsoft website to update your browser.<br>Microsoft website: <a href="http://www.microsoft.com/windows/ie">http://www.microsoft.com/windows/ie</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| IP Finder cannot store network parameters.                                                | <ul style="list-style-type: none"> <li>• Do not use spaces. Use underline “_” or dash “-”.</li> <li>• Your connection might have problems. Please ensure that the network parameters and the camera connection are correctly set.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Access to Camera</b>                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| I cannot enter the login screen and camera page from Internet Explorer. What should I do? | <ul style="list-style-type: none"> <li>• The IP address of the camera is possibly being used by another PC or device. Please disconnect the network cable from the camera and execute PING to confirm if the IP address has been used.</li> <li>• It is possibly due to the network cable. Please use the cross-line network cable to connect the PC and the camera, and see if the log-in screen appears.</li> <li>• Be sure that the network connection and the settings are properly configured.</li> <li>• Be sure to enter correct IP address in the Internet Explorer. If you use dynamic IP address, the address might have been changed after your last check.</li> <li>• Internet traffic might slow down the webpage access. Please wait.</li> <li>• Be sure that you are using http port. The default setting is Port 80. It will be converted to the private camera IP address.</li> <li>• The port assigned for your camera might not able to access the Internet. Contact your ISP to acquire a usable port.</li> <li>• The proxy server might be blocking you from connecting to the camera. Do not set the proxy server.</li> <li>• Please be sure that the default gateway address is correct.</li> <li>• Your router might need Port conversion. Refer to the user manual of your router for details.</li> <li>• The package filtering function of the router might have blocked the access to the external Internet. Refer to the user manual of your router for details.</li> <li>• If you are using DDNS, please remember to set the default gateway and server address.</li> <li>• If none of the procedures above is working, please reset to the factory default values and re-install.</li> <li>• If the problem still persists, there might be some problems with the product. Contact the dealer who sold you the product for more help.</li> </ul> |
| No image appears on the main control screen.                                              | <ul style="list-style-type: none"> <li>• When using PC to connect to the camera for the first time, a security warning window will tell you that you need to download the ActiveX control. When you are using Windows 2000 or Windows XP, you might need a properly- authorized user account to install the application</li> <li>• Network traffic might slow down the video streams. If the video is extremely slow, select a lower resolution for a lower bandwidth requirement.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Check whether the Active X control of the camera has been installed in your computer.     | Select C:\Windows\Downloaded Program Files to check if the file “ <b>Media Viewer Class</b> ” is <b>registered</b> . The status bar should indicate the file has been installed. If you do not see this file, be sure that your Internet Explorer security is properly set (the default value is moderate). Re-connect to the camera main page and download the file again. Incomplete download or installation of the                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

|                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                         | camera ActiveX control is the major reason for this problem. Check the security setting of your Internet Explorer. Close and re-open Internet Explorer, and enter the main page to see if you can log in.                                                                                                                                                                                                                                                                                                                       |
| Internet Explorer displays the following message:<br>Downloading the ActiveX control is prohibited under the current security setting." | Change the IE security setting to allow downloading unsigned ActiveX control.<br>IE→Tools→Internet Options→Security→Custom Level. Change "Inactive" to "Tips" for the ActiveX control if required.                                                                                                                                                                                                                                                                                                                              |
| The camera can operate only in the LAN rather in the Internet environment.                                                              | <ul style="list-style-type: none"> <li>• A firewall mechanism might have been activated. Check the setting of your system or ask your network administrator. To access the camera from the Internet, you may need to change the setting of the firewall.</li> <li>• Make sure that your camera does not conflict with other servers on the same LAN.</li> <li>• Check the router and make sure that its setting allows it to access your camera from the Internet.</li> </ul>                                                   |
| The number of frames transmitted are less than the defined value.                                                                       | <ul style="list-style-type: none"> <li>• Congestion of the network or objects of the image may affect the number of frames transmitted. The number of frames may be less than the defined value when they are transmitted via a congested network.</li> <li>• The number of frames transmitted may become less when multiple users are viewing the video stream.</li> <li>• The network hub might be another reason for this problem, especially when multiple camera video streams are viewed simultaneously.</li> </ul>       |
| When the audit function is activated, the video streaming area becomes black or the transmission becomes slower.                        | <ul style="list-style-type: none"> <li>• When you connect your PC to the camera, no sufficient bandwidth is available to support more frames with the current resolution of video streams. Reduce the resolution to QCIF (176x144) or CIF (320x240) and deactivate the audio function.</li> <li>• The audio signal needs 32 to 64 kbps of your bandwidth. You can deactivate the audio function to improve the image quality. Your Internet service may have not sufficient bandwidth to support audio transmission.</li> </ul> |
| Images cannot be transmitted via e-mail or FTP.                                                                                         | <ul style="list-style-type: none"> <li>• Make sure the IP address of the gateway and domain server (DNS) has been defined correctly.</li> <li>• Where FTP still fails, contact your ISP or network administrator to check the FTP server.</li> </ul>                                                                                                                                                                                                                                                                            |
| I can't control the camera to move up, down, right, left or to the center or preset point.                                              | <ul style="list-style-type: none"> <li>• When communication to the camera stops, click "<b>Refresh</b>" on your IE browser to refresh the transmission.</li> <li>• It might be that other users are controlling the movement of the camera.</li> <li>• The horizontal/vertical movement of the camera has reached its limit.</li> <li>• The horizontal/vertical remote control option of the camera might have been deselected.</li> </ul>                                                                                      |

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| I can't control the camera to move up, down, right, or left smoothly. | Delay might occur when you are accessing a video stream and remotely moving the camera horizontally. Where significant delay is identified when you move the camera horizontally or vertically deactivate the audio streams and/or reduce the size of the video stream...                                                                                                       |
| <b>Camera Image Quality</b>                                           |                                                                                                                                                                                                                                                                                                                                                                                 |
| Camera has a problem focusing.                                        | <ul style="list-style-type: none"> <li>• The lens might be contaminated with dust, fingerprints, or other dirt. Use a special cleaning cloth to clean the lens or adjust the focus manually.</li> <li>• Focusing might be impossible in some cases. If the object is too close to the lens, move it away from your camera.</li> </ul>                                           |
| Color of the video stream is too deep or light.                       | <ul style="list-style-type: none"> <li>• Please confirm that the image you are watching has the best quality. Adjust the setting of your display card (color quality) to at least 16 bits (24 bits or more are recommended).</li> <li>• Incorrect camera video setting. You may need to adjust some parameters, such as brightness, contrast, color, and saturation.</li> </ul> |
| Video stream flashes.                                                 | <ul style="list-style-type: none"> <li>• Incorrect power cord frequency may cause flashing of the image. Confirm that your camera uses NTSC or PAL system.</li> <li>• The image flashes if the objects are black. In this case, adjust the illumination brighter around your camera.</li> </ul>                                                                                 |
| This is noise problem during transmission of the image.               | Noise may be produced if you install your camera at a very dark place. Adjust the illumination around your camera.                                                                                                                                                                                                                                                              |
| <b>Others</b>                                                         |                                                                                                                                                                                                                                                                                                                                                                                 |
| How to reboot my camera?                                              | If you only need to re-boot the system and don't want to change any setting, enter the Setting page and select the Reboot option at the bottom of the screen. The system will reboot automatically.                                                                                                                                                                             |
| I can't replay recorded files.                                        | Confirm that you have installed Microsoft®'s DirectX 9.0 or above and use Windows Media Player 9 or above.                                                                                                                                                                                                                                                                      |

## **FCC Class B Announcement**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

You are cautioned that any change or modifications to the equipment not expressly approve by the party responsible for compliance could void your authority to operate such equipment.